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ᴄU.S. National Institutes of Health.
News releases pertaining to the
cornerstone ceremony and dedication of
the Clinical Center. 1951.

A Noble
purpose

HOLD FOR RELEASE HOLD FOR RELEASE HOLD FOR RELEASE

CONFIDENTIAL: The following address of the President at the dedication of the National Institutes of Health Clinical Center, Bethesda, Maryland, is for automatic release at 3:30 p.m., E.D.T., Friday, June 22, 1951. No portion, synopsis, or intimation may be published or broadcast before that time.

PLEASE GUARD AGAINST PREMATURE PUBLICATION OR ANNOUNCEMENT.

JOSEPH SHORT
Secretary to the President

We are here today to lay the cornerstone of a building which will be devoted to the service of mankind. The men and women who work in this clinical research center will be striving to save human lives and to prevent human suffering.

That is a noble purpose.

As a people, we have constantly sought better health and longer lives for our citizens. We have done so not merely because human strength and human intelligence are great national assets. Far more important, we believe that there is something sacred about every human soul that God has put on this earth.

We believe in the rights of the individual. We acknowledge his supremacy over the state. That is the great mark of distinction between our democracy and the totalitarian dictatorships. In the totalitarian countries, little value is placed on human life. People are herded into slave labor camps by the millions, and are allowed to die like flies from starvation, or disease, or hardship.

In our country, the government exists to serve the people. Our government is one of the instruments through which people achieve freedom, happiness and the good things of life.

That is true in the field of health as in other parts of our national life. Advances in medical knowledge and medical care in our country have come about through the combined efforts of private individuals and institutions and local, State, and Federal agencies.

This clinical research center will advance the work that is being done by all of us to achieve better health. I am especially glad to participate in these ceremonies, because I believe so strongly in the importance of medical progress. And I know what amazing advances can be made, because I know what has happened in my own lifetime.

At the turn of the century, the average American could expect to live only 49 years. The two biggest killers, pneumonia and tuberculosis, exacted a frightful toll. Diphtheria and typhoid ran wild. We were losing 130 of every thousand babies before they were a year old. Our maternal death rate was very high -- more than six mothers died in childbirth for every thousand babies born. In World War I, 141 American soldiers out of every 10,000 were cut down by disease -- more than were killed by enemy bullets.

Today, many of these scourges have been almost completely eliminated. The death rate from tuberculosis, pneumonia, and other infectious diseases is at the lowest point in medical history. We have reduced infant mortality by more than two-thirds. Our maternal death rate is now less than one mother per one thousand births. The death rate from disease in our Armed Forces in World War II was only about 6 out of every 10,000.

Most remarkable of all, we have extended the average life 18 years in this short half century. The average American baby born this

year can expect to live 67 years -- until the year 2018.

Medical science has won victory after victory over the deadliest diseases of a generation ago. During the first half of the twentieth century, it is safe to say that we successfully conquered the infectious diseases. Now, in the second half of the century, we are facing an even greater challenge -- the battle against the chronic diseases.

Over one million Americans died last year from cancer, heart trouble, diabetes, and other chronic illnesses. As the life span of our people has grown longer, the mortality from these illnesses has risen. Last year, the death rate from heart disease was the highest ever recorded for any single human ailment, and it was 20 per cent higher than 10 years ago. Fifteen per cent more people died of cancer last year than ten years ago.

The most heart-rending of the chronic afflictions, and perhaps the most serious, is mental illness. Over 600 thousand hospital beds -- about 50 per cent of the hospital beds in this country -- are occupied by the mentally ill.

All these chronic illnesses take a tremendous human toll. It is estimated that more than 25,000,000 Americans suffer to some degree from chronic diseases.

Modern medicine must find ways of detecting these diseases in their early stages and of stopping their destructive force. That will be the major work of this clinical research center. There could be no more useful expenditure of the taxpayers' funds.

The center will be operated by the Public Health Service of the Federal Security Agency. It will be the home of one of the greatest groups of scientists ever gathered together for basic and applied medical research.

Basic research has been at the core of the great advances in medicine during the last half-century, and the scientists of the Public Health Service have been in the forefront of this research.

Scientists of the Public Health Service were the first to discover that pellagra was caused by a dietary deficiency, and they devised the means for its prevention and cure. They found the cause of Rocky Mountain spotted fever and how to vaccinate against it. They developed the use of fluorides for the protection of teeth, opening the way to the major reduction of dental decay.

Public health research workers right here at Bethesda developed a vaccine against typhus. Their vaccine has kept our forces in Korea free from typhus, while the North Korean and Chinese communists have suffered seriously from that disease.

The fine record of Public Health Service research workers promises well for the future. This magnificent building will give them many new opportunities to forge ahead in the field of medical discovery. I am particularly glad that one of the wings of the building has been especially designed for work with radioactive materials -- to put to peaceful and constructive use our increasing knowledge of atomic energy.

This clinical research center will not be an isolated enterprise. Research scientists from medical schools, private hospitals, and other private institutions will come here to share in the work. And the Federal Government will continue to make grants-in-aid for medical research in other places. In 1950, the Public Health Service made more than 1,500 research grants totaling about 14 million dollars. These grants went to universities, hospitals and medical schools in every part of the country.

In the last few years, government assistance to medical research has been greatly expanded. At one time, there was a great hue and cry by the viewers-with-alarm that Federal assistance would threaten freedom of research. That wasn't true, of course. The fact is that

the presidents of some of our leading universities have gone on record to the effect that Federal assistance has broadened both the scope and freedom of medical research. Their experience with these research grants is proof that government aid does not mean government control.

Today, there is a growing awareness that medical research needs support from the Federal Government, from State and local governments, and from industry, endowment funds, and private contributions. It will take support from all these sources to give us the rapid progress we need.

At the same time that we are moving forward with medical research, we must drive ahead to translate the new knowledge gained by research into better medical care for more people. Here we have run into difficult problems, but we are making progress.

We have made great strides in the field of public health. The Federal, State and local governments have formed an effective partnership. In 1950, $231,000,000 was spent for State and local public health services. Forty-five million dollars of this was provided by the Federal Government, $96,000,000 by State governments, and $90,000,000 by local governments.

These funds were used by public health doctors and nurses who are in the front lines of the fight against disease -- X-Raying to find tuberculosis, inoculating against diphtheria and typhoid, treating venereal disease, guarding the purity of water and milk supplies, organizing health services for civil defense, and performing a host of other services to protect the health of the American family.

Yet, our present local public health system is woefully inadequate to meet its responsibilities. Thirty-two million Americans live in areas which are not served by full-time public health workers.

I am happy that the United States Senate at its present session has passed legislation to help strengthen and expand the Nation's local public health units in our cities and counties. I hope that the Congress will complete action quickly on this legislation. Stronger local public health units are essential to better health in America.

We are now making good progress in meeting our needs for hospitals and health centers. The projects already approved under the National Hospital Program, started in 1946, will give us 65,000 additional hospital beds and 240 new health centers, with the Federal Government contributing about a third of the cost. These hospitals are being built where they are needed most. Most of them are small hospitals of 50 beds or less, and most of them are located in towns of 10,000 people or less.

Hospitals and research centers are worthless, however, without trained medical personnel to staff them.

In recent years, the education of students in the medical, dental, nursing, and allied professions has not kept pace with the increase in population. These shortages are crippling hospital services all over the country. Less than a month ago, every Washington newspaper carried front page stories on the closing of many hospital beds in this area because of a critical health personnel shortage.

These shortages are being aggravated by the needs of our Armed Forces. Our military medical men are doing a magnificent job in saving lives on the Korean front, but we have had to dip deeply into our medical strength over here to accomplish this.

In order to supply more doctors and nurses, we will have to strengthen and expand our schools. In spite of the best efforts of the medical schools, they have had to turn away thousands of applicants each year. The income of the medical schools has not risen to meet the rising costs of medical education. They are today in the most precarious financial condition in their history. President Hoover, as honorary chairman of the National Fund for Medical Education, pointed out recently that the financial condition of our medical schools is so acute that few can continue even their present programs without large-scale financial aid.

Legislation to remedy this situation is now before the Congress. This legislation will provide emergency Federal aid for five years to tide the schools over the present crisis. The overwhelming majority of the medical school deans support this legislation. It is not intended to replace private sources of support. On the contrary, I am sure it will broaden this support in the same way in which both public and private sources, joined together, have broadened the base and scope of medical research. I hope that the Congress will act on this legislation soon.

Finally, we have the problem of meeting the cost of medical care. The research discoveries which will be made at this clinical center and elsewhere must not be confined to a chosen few, simply because the rest of us cannot afford to use them.

At the present time, most people find it very difficult to pay for medical care. I have been very glad to see the growth of the many private health insurance plans over the last several years. But the plain fact is that they do not meet the problem. They are not reaching the overwhelming majority of low and middle income families.

Less than four million Americans have reasonably complete medical care insurance, and 75 million have no health insurance at all. Skyrocketing medical costs are pushing millions of Americans into the medically indigent class.

Since 1945, I have been proposing to meet this problem by national health insurance. This proposal has generated a great deal of controversy. I still believe it is sound, and that the Nation would be greatly strengthened by its adoption.

I want to make it clear, however, that I am not clinging to any particular plan. What I want is a good workable plan that will enable all Americans to pay for the medical care they need. And I will say here and now that if the people who have been blocking health insurance for five years will come up with a better proposal -- or even one that is almost as good -- I'll go along with them. I want to get the job done, and I am not concerned in the slightest with pride of authorship.

But I am concerned with results. Medical care is for the people and not just for the doctors. Our objective must be to make the best modern medical care available to more and more people. I intend to keep right on working for that.

I have been speaking of the medical needs of our own country. We should never forget, however, the extremely fortunate position we are in compared to the rest of the world.

Throughout the world, almost half the people -- more than one billion men, women and children -- are victims of preventable disease. Millions of them are weakened by malaria. Millions die each year from tuberculosis. Three babies out of every ten die in infancy.

In many parts of the world, the average life expectancy is under 30 years. This means that the average farmer or industrial worker in these countries has but a few years of limited productivity before death.

Obviously, people with such handicaps face immense difficulty in striving for economic and social progress. It is urgently necessary that we help them to learn and put into effect modern medical knowledge and public health methods. This is one of the most important parts of the work we must do under the Point IV program.

We know what can be done. In Western Europe, when World War II ended, disease was rampant and epidemics threatened wide areas. Experts said that 20 years' effort in public health had been lost as a result of the war.

In three years, with our help, the tide was turned. By 1948, death rates in Western Europe were the lowest ever recorded. Tuberculosis, which had spread to an alarming extent, was reduced to a lower level than ever before. Malaria was nearly wiped out as far east as Greece. Typhus and smallpox were gone. The public health work in Europe was more completely successful than the efforts made in any other field of postwar rehabilitation.

Of course, this was done in Europe, where there was a large group of medically trained specialists. We cannot expect such quick results in the underdeveloped areas of the world. They are desperately short of doctors and nurses and health facilities of all kinds. In parts of Iran, for example, there is only one doctor for each 80,000 people. It will take time to remedy these conditions. But progress is being made.

More health technicians are being trained. Last year, thousands of professional health workers came to the United States for training -- they came from the Philippines, Latin America, and many other areas all around the world.

We are also sending our specialists abroad. For example, last year, a team of our public health officers flew to Indo-China and helped the people there plan a campaign against malaria and other serious diseases. Another team spent ten weeks in Iran, showing village physicians and government medical officers how to use vaccines and DDT.

This public health work is the key to improving conditions in the underdeveloped areas. No funds we can spend will bring richer rewards in human progress and in strength for peace. This is recognized by other countries as well as our own, and splendid work is being done in this field by the World Health Organization.

The United States was one of the founding members of the World Health Organization. It is a source of deep satisfaction to me that Surgeon General Scheele of the Public Health Service was elected to the Presidency of its annual Assembly in Geneva a month ago.

As we lay the cornerstone of this clinical center, I see in this structure a symbol of what is finest in our way of life.

The work that is done here in Bethesda will bring life and health to all mankind. This center is a specific and exciting expression of man's humanity to man. It will save the lives and alleviate the suffering of our own children and grandchildren. But, more than that, it will service men of all religions, all races, and all nations -- everywhere in the world.

May it serve for many generations as a monument to our desire for human health and happiness in a world at peace.

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FEDERAL SECURITY AGENCY

For Release Upon Delivery

Cornerstone Ceremony
National Institutes of Health
Bethesda, Maryland
June 22, 1951, 3-4:00 P.M.

INTRODUCTION OF DR. LEONARD A. SCHEELE
SURGEON GENERAL, PUBLIC HEALTH SERVICE

By
Oscar R. Ewing
Federal Security Administrator

Thank you, Dr. Bronk.

Our next speaker is well known to every one at the National Institutes of Health and, I am sure, to most of this audience. A former Director of the National Cancer Institute, a man who served with distinction on General Eisenhower's staff during the war, a scientist, an administrator of great talent, and a career officer in the Public Health Service, who now occupies the post of Surgeon General.

During his regime as Surgeon General there have come into being the National Heart Institute, the National Mental Health Institute, the National Microbiological Institute, the National Institute of Arthritis and Metabolic Diseases, and the National Institute of Neurological Diseases and Blindness, and this new building before which we are gathered.

That growth -- and the expansion of the activities throughout the Public Health Service -- owe much to his untiring leadership, his imagination, and his skill as an administrator.

I am happy to call now upon Dr. Leonard A. Scheele, Surgeon General of the Public Health Service.

FEDERAL SECURITY AGENCY
Public Health Service
National Institutes of Health

Clinical Center Cornerstone Ceremony - June 22, 1951
Remarks by Dr. Sebrell

Ladies and gentlemen - on behalf of Surgeon General Scheele and the entire staff of the Public Health Service, welcome.

We are honored that so many distinguished physicians, scientists, and public leaders have joined with us today. We are especially pleased to see so many of our friends from the Bethesda area.

This building is another evidence that the people of this Nation believe strongly in the value of medical research.

Beginning in 1953, scientists here will expand their efforts to solve the most serious of today's medical problems. The patients who are sent here by physicians and hospitals from all parts of the country will receive the finest of medical care. They will lack nothing that is needed for their comfort and well-being.

I should emphasize, however, that this will not be a general hospital. Its patients will be individuals who, before they are referred to us, will have been diagnosed as having a particular type of disease being studied by the scientists here.

The policies under which the Clinical Center will function are designed specifically to encourage freedom of scientific inquiry, free interchange of ideas, and cooperation among all the research specialists.

Extremely close working relations will be maintained with medical schools, universities and hospitals throughout the country. This will be as much their Clinical Center as it is ours. It will be a National Center for the advancement of National health.

And now, it gives me great pleasure to introduce the chairman of these ceremonies. He is a man who has staunchly supported the Public Health Service in its effort to protect the health of the Nation. He is a man who, with the utmost sincerity and with great vigor, believes as did Disraeli that "the health of the people is really the foundation upon which all their happiness and all their powers as a state depend." Ladies and gentlemen, Oscar R. Ewing, the Federal Security Administrator.

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For Release Upon Delivery

FEDERAL SECURITY AGENCY

Cornerstone Ceremony
National Institutes of Healt
Bethesda, Maryland
June 22, 1951, 3-4:00 P.M.

INTRODUCTION OF PRESIDENT OF THE UNITED STATES

By
Oscar R. Ewing
Federal Security Administrator

MR. PRESIDENT:

I welcome you to the National Institutes of Health here in Bethesda, Maryland, not only on behalf of the Federal Security Agency, the Public Health Service, and this distinguished company -- I welcome you also on behalf of all the American people. For in a very real sense it is the American people -- all the people -- who have made this building possible and who will benefit from the work which will be carried on here.

Today, Mr. President, you lay the cornerstone of what will be one of the finest clinical research centers the world has ever seen. Within its walls, our men and women of science, aided by the best of scientific equipment, will devote their lives and their talents to some of the greatest medical research projects ever initiated in mankind's endless quest for the causes and cures of disease. These men and women will be free to follow knowledge to the utmost bounds of human thought. Their efforts will be dedicated to the relief of man's suffering, his anguish, his pain.

No nobler tasks can be undertaken.

It is fitting that this ceremony be honored by you, Mr. President, who represent the 150 million free men and women of America; and we are deeply grateful for your presence here today.

Ladies and Gentlemen, the President of the United States.

REMARKS OF DR. LEONARD A. SCHEELE, SURGEON GENERAL OF THE PUBLIC HEALTH SERVICE, AT THE CORNERSTONE-LAYING CEREMONIES OF THE CLINICAL CENTER, NATIONAL INSTITUTES OF HEALTH, JUNE 22, 1951 AT 3:15 P.M.

(FOR RELEASE UPON DELIVERY)

Mr. Ewing, Honored Guests

Doctor Sebrell has told us about the scheme of the Clinical Center. The philosophy back of the Center and its program is much like the one that guided the founders of this Nation: that is, to form a union of diversities. Whereas in the past research and medicine have focused upon different organs of the body or different diseases, the aim now is to study and treat the patient as a whole man: in short, to put the body together again. In the Clinical Center, our aim is to go one step further and put the research body together again--in terms of basic scientists and clinicians who will study the patients and the medical problems that afflict millions of human beings.

The real and enduring goals of every medical research institution are to preserve human life and to make that life happier and healthier. Up to the present time, medicine and public health have had great successes in combating the major threats to life and health. Some pessimists in fact have gone so far as to say that modern medicine has only added to our social and economic problems by saving and prolonging life. The same line of thinking may produce some criticisms of this Clinical Center on the ground that research is too costly, or that we should not add our shoulder to the wheel.

But there is ample evidence that the costs of research are infinitesimal by comparison with the dollars and cents savings realized from more effective methods of preventing or treating disease. At the turn of the century, for example, the cost of medical care alone for typhoid fever was estimated at $45 million a year. As a result of research, control methods have reduced that figure to well under $1 million a year. How much would be spent this year for the care of patients with pneumonia, venereal diseases, scarlet fever, and many other infections--if we had not spent a few millions for the development of penicillin and other antibiotics? The savings over the years since the development of these and other fruits of research will total billions of dollars--to say nothing of the savings in life and earning power.

More than ever before, this Nation needs to expand its medical research effort. More than 25 million Americans are afflicted with chronic diseases or permanent impairments. Cancer and diseases of the heart and circulation are not only the chief causes of death, but also the causes of untold suffering and prolonged disability. Arthritis, rheumatism, neurological diseases, blindness, and mental disease add to the total of disabled persons--chiefly in the productive years of life.

Because so little is known of the basic causes of these conditions, modern medicine is forced to do a half-way job in prevention and cure. In many instances, the best we can do is diagnose advanced cases and try to alleviate suffering with the meager means at hand. Until medical research is given the fullest possible opportunity

to find answers to the problems of chronic disease, our hospitals and physicians will not be able to turn the tide. Until medical research is given ample support from all sources, we shall continue to need more and more hospital beds for the care of the chronically ill. Scientists cannot unlock the secrets of chronic disease without adequate facilities and clinical materials. These conditions must be studied at the bedside, as well as in the laboratory. And the two types of investigation go hand in hand. It was the clear understanding of this fact that inspired Surgeon General Thomas Parran and Doctor R. E. Dyer, former Director of the National Institutes of Health, to bring to fruition this Clinical Center.

I am happy to say that both Doctor Parran and Doctor Dyer are in the audience today. Doctors George McCoy and Lewis R. Thompson, past Directors of the National Institutes of Health, also are here. We all owe a real debt of gratitude for their development of research in the Public Health Service and for their foresight in establishing the sound principles for our attack on disease, leading to the development of this Center.

It is especially gratifying that this ceremony coincides with the regular meeting of our National Advisory Cancer Council. Among our honored guests there are also some members of the Public Health Service's other six advisory councils--the National Advisory Health Council, and the special councils on heart disease, mental health, dental research, arthritis and metabolic diseases, neurological diseases and blindness.

The Councils have been established by Congress to link the research programs of the Public Health Service back to society. They are composed of distinguished scientists, physicians, educators, and leaders in public affairs who have no other connection with the Government. Through these Councils, citizens and universities, medical and dental schools, hospitals, and other institutions participate in an important activity of their Government.

Our councils have broad responsibilities--not only for reviewing and recommending research grants, but also to assist the Public Health Service in shaping its policies and programs.

The Councils have played a decisive role in the development of this Clinical Center, as well as in the development of our research grants and fellowships, our aid to professional schools in the teaching of cancer, cardiovascular disease, and mental health, and our control programs in those special fields.

We in the Public Health Service welcome and foster this broad participation of citizens in our activities. In a democracy, cooperation between the citizen and his Government is essential. The men and women in the Federal Government undertake to administer the laws enacted by Congress in a manner that will implement and strengthen the democratic principles of individual freedom and cooperative action. To discharge this trust, we need the active help of citizens whose interests, special knowledge, and leadership reflect the Nation's needs, resources and possibilities for carrying out the programs established by Congress.

Our Councils, together with their Study Sections, -- also composed of scientists from institutions all over the country -- have generously given the Public Health Service splendid cooperation. In administering research grants, this type of citizens' participation is especially important.

We are responsible to Congress for the proper distribution of substantial sums. At the present time, the competition for financial support of research is nation-wide--and intense. We must administer these funds so as to insure the freedoms essential to scientific progress--including the freedom of institutions and scientists to plan and conduct their programs without interference. That we have been able to carry out these responsibilities successfully is due in no small measure to the thoughtful and devoted services of our council members.

Our plan is to operate this Center so that medical investigators from all over the country may come here for short or long periods--to observe, to engage in our research programs, or to widen their perspective and that of our staff. We want the work done here to be of National interest, National participation, and National pride. We intend to make it so.

The laying of the cornerstone, in fact, marks a point of time of the greatest significance to members of the Public Health Service --past, present, and future.

It signifies to the present staff of the National Institutes of Health that the worst headaches are over. The Clinical Center, almost unbelievably, is in its final stages of construction. Those

of us who were planning for this four and five years ago are especially happy today.

It signifies to all of us another long stride forward in medical research for the entire Nation. And that will mean, ultimately, better health and happiness for future generations.

NATIONAL INSTITUTES OF HEALTH
Bethesda, Md.

OBJECTS AND SYMBOLS SIGNIFYING ADVANCES IN CLINICAL MEDICINE WHICH ARE ENCLOSED IN THE CORNERSTONE

June 22, 1951

The Clinical Center has been planned as the Nation's institution devoted to the advancement of laboratory research through joinder with clinical facilities. Accordingly, it has been deemed appropriate to symbolize recent advances in clinical medicine and progress in this field by placing in the cornerstone samples of therapeutic aids, drugs, techniques and devices which represent diagnosis, treatment and prevention, with some indication of their function, as follows:

DIAGNOSIS

PHOTOFLUOROGRAPHY, making possible inexpensive, rapid X-ray screening of large populations for chest diseases, especially tuberculosis.

An ELECTRO-ENCEPHALOGRAM indicating spreading cortical depression.

PAPANICOLAOU CANCER SMEAR TEST SLIDE, indicating presence of cancer in region of cervix.

A VENOUS CATHETER used to measure pressures on different sides of the heart; a diagnostic tool for determining presence, location and extent of heart disease.

C14 (Barium Carbonate), representative of artificial isotopes.

PLASTIC EMBEDMENT (stained mouse skeleton); the development of technical aids to improve medical teaching and diagnostic procedures.

TREATMENT

Sulfa drugs, such as SULFANILAMIDE, and the antibiotics, such as PENICILLIN, for the control of many infectious diseases.

ACTH (crystalline form) and CORTISONE for the treatment of such diseases as rheumatism, arthritis, and rheumatic fever.

NORMAL HUMAN PLASMA (dried) used as a substitute for whole blood in treatment of burns and shock.

Anesthetic, such as SODIUM PENTOTHAL as an invaluable aid in the practice of surgery.

Synthesis of effective pain-relieving drugs (analgesics) such as METHADON, making this country independent of foreign sources of supply of opium from which morphine and codeine are derived.

PREVENTION

Insecticide, such as DDT (Dichlorodiphenyltrichlorethane), for the prevention of insect-borne diseases affecting vegetable, animal and human life.

Vaccines, such as those for YELLOW FEVER and TYPHUS (immune serum globulin).

SODIUM FLUORIDE for use in public water supply systems as a partial protection against tooth decay.

Synthetic vitamins such as FOLIC ACID and VITAMIN B-12, for both the treatment and prevention of nutritional deficiency diseases.

NATIONAL INSTITUTES OF HEALTH
OPEN HOUSE, JUNE 22, 1951

Motion Picture Schedule
Wilson Hall 3rd Floor, Building 1

Film

REPORT ON THE LIVING, ACTH *Dr. Thomas E. O'Brien [illegible]
A young victim of rheumatic fever is treated and cured with the new drug.

CHALLENGE: SCIENCE AGAINST CANCER *Miss Rosalie Peterson [illegible]
A story of research into the secrets of cancer and the living cell.

ACTIVITY FOR SCHIZOPHRENIA *Dr. James V. Lowry [illegible]
Shows treatment for mental patients in a Veterans Administration Hospital.

Intermission [illegible]

STORY OF WENDY HILL [illegible]
Detection and control of diabetes.

PREFACE TO A LIFE *Dr. Mabel Ross 4:45
How parental attitudes affect emotional development in children.

JOURNEY INTO MEDICINE [illegible]
A young doctor enters public health work.

SO MUCH FOR SO LITTLE 6:15
Shows need for and low cost of public health services.

GUARD YOUR HEART *Dr. Thomas E. O'Brien 6:35
A middle-aged man finds that some work is too strenuous for his middle-aged heart.

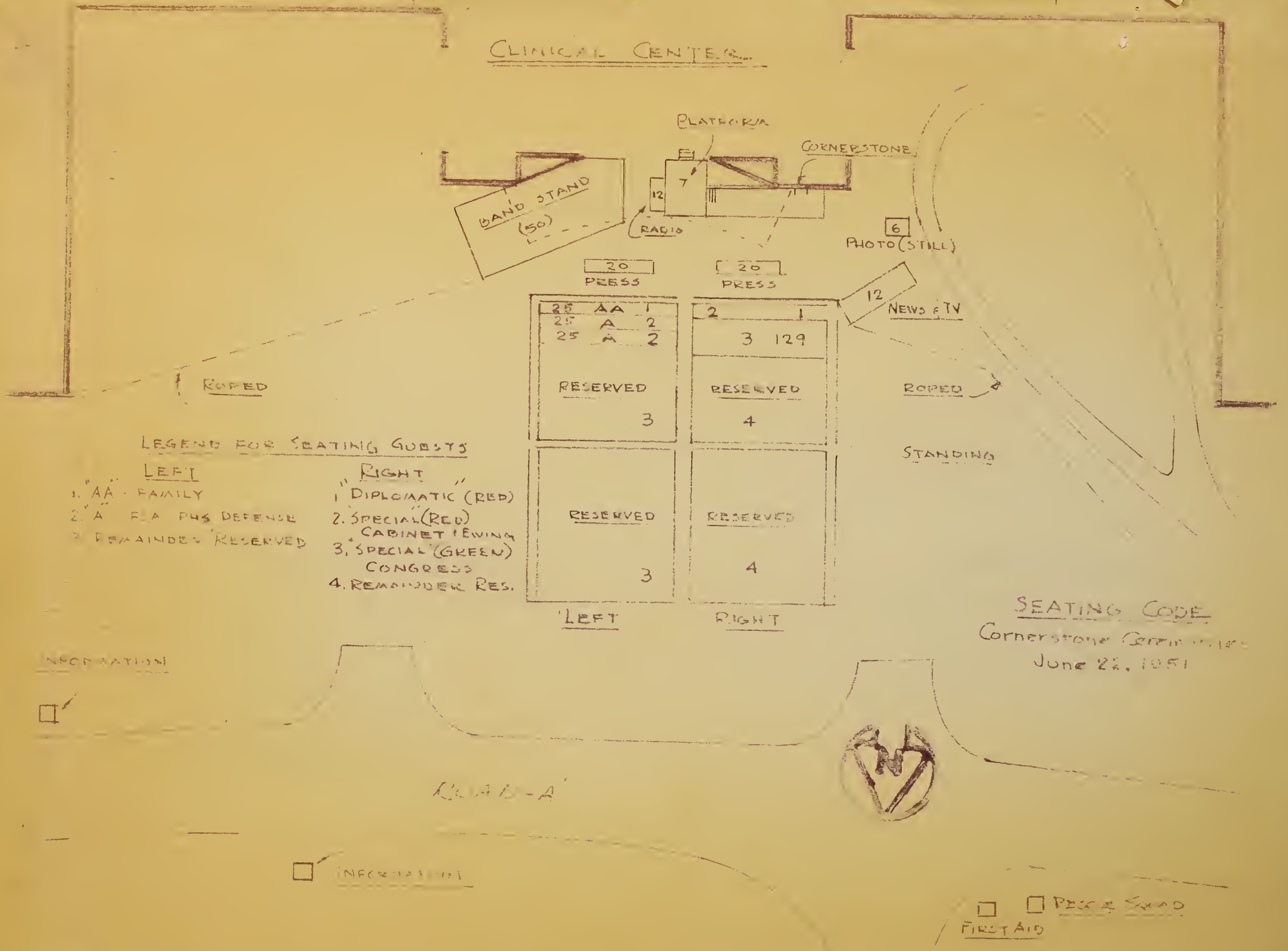
ANGRY BOY *Dr. Joseph Bobbitt [illegible]
Shows how a boy is helped in a child guidance clinic.

CHALLENGE: SCIENCE AGAINST CANCER *Miss Rosalie Peterson [illegible]
A story of research into the secrets of cancer and the living cell.

THE STEPS OF AGE *Dr. Riley Guthrie 8:30
A story about the emotional problems of the aging.

Note: For information regarding the availability of these films, please call or write the Scientific Reports Branch, National Institutes of Health, Bethesda 14, Maryland.

*Discussion Leader



SEATING CODE

Cornerstone Ceremonies
June 22, 1951

LEGEND FOR SEATING GUESTS

LEFT

1. "AA" - FAMILY
2. "A" F.S.A. PHS DEFENSE
3. REMAINDER RESERVED

RIGHT

1. "DIPLOMATIC" (RED)
2. "SPECIAL" (RED) CABINET & EWING
3. "SPECIAL" (GREEN) CONGRESS
4. REMAINDER RES.

FEDERAL SECURITY AGENCY
Public Health Service
NATIONAL INSTITUTES OF HEALTH
Bethesda, Md.

R. E. DYER LECTURESHIP

Thursday, June 21, 1951

8:15 P.M.

Major Operating Committee

Dr. J. R. Heller, Jr., Chairman
Mr. W. G. Baylis
Dr. Joseph Bobbitt
Mr. Robert Grant
Dr. David Scott
Dr. James Hundley
Dr. Thomas Tomlinson
Mr. E. M. Allen
Bethesda C. of C.

Reception Committee

Miss Rhobia Taylor, Chairman
Dr. W. J. Bowen
Dr. Elizabeth Verder
Miss Zelda Schiffman

NATIONAL NAVAL MEDICAL CENTER

Main Building

Lobby -	Mr. Alan Hough (Laboratory of Physical Biology, NIAMD) Miss Elizabeth Johnson (Pathology Section, NCI)

Second Building

1st Floor Stairs	
Front	Mr. Leonard Kedda(Endocrinology Section, NIAMD) Mrs. Ada Levy (Laboratory of Biologics Control, NMI)
Rear	Mr. Harold Miller (Lab. of Chemistry, NIAMD) Miss Joan Evans (Lab. of Infectious Diseases, NMI)
2nd Floor Stairs	
Front	Mr. Robert Ing (Lab. of Biochemistry and Nutrition, NIAMD) Miss Marie Granan (Lab. of Physical Biology, NIAMD)
Rear	Mr. Charles Hanna (Laboratory of Physical Biology, NIAMD) Miss Jane Taylor (Laboratory of Tropical Diseases, NMI)
Liaison	Mr. Walter Newton (Laboratory of Tropical Diseases, NMI)

Auditorium

Lobby	Dr. J. R. Heller, Jr.,(Director NCI) Mr. W. G. Baylis (Executive Officer, NIAMD) Dr. Joseph Bobbitt (Professional Services Branch, NIMH) Mr. Robert Grant (Asst. Administrative Assistant, NHI) Dr. David Scott (Natl. Inst. of Dental Research) Dr. James Hundley (Lab. of Biochemistry & Nutrition, NIAMD) Dr. Thomas Tomlinson (Lab. of Tropical Diseases, NMI) Mr. E. M. Allen (Chief, Division of Research Grants) Dr. W. J. Bowen (Lab. of Physical Biology, NIAMD) Dr. Elizabeth Verder (Lab. of Infectious Diseases, NMI)

Card Receivers	Mr. Horace Turner (Lab. of Infectious Diseases, NMI) Miss Jeanette Ruth (Lab. of Physical Biology, NIAMD)
Ushers	
Rear	Mr. Walter Hansen (Biology Section, NCI) Mr. Richard Whitt (Lab. of Infectious Diseases, NMI) Miss Mary Kude (Lab. of Biochemistry & Nutrition, NIAMD) Miss Barbara Ottinger (Lab. of Infectious Diseases, NMI)
Mid-Aisle	Mr. Bolivar Lloyd (Biophysics Section, NCI) Mr. Dennis Doddy (Lab. of Physical Biology, NIAMD) Mrs. Cynthia Risley (Endocrinology Section, NIAMD) Mrs. Belle Anderson (Research Branch, NCI)
Laision*	Miss Jean Hickman (Laboratory of Physical Biology, NIAMD)

* Responsible for balcony seating using auditorium ushers.

"QUE SHEET" FOR CORNERSTONE CEREMONY

*Time Schedule and Program Details -- June 22, 1951

(Revised - June 19)

Time (P.M.)	Action and Detail
2:30	- Open House Leaders Notification to guests of temporary closing of exhibits.
2:40	- Closing of exhibits; beginning of band music.
	- Seating of guests in reserved area, distribution of programs, continuation of band music.
3:03	- Seating of speakers on platform.
	(FREEZE SEATING AND CLEAR CENTER AISLE)
3:03	- Presentation of Colors (at signal of band leader)--double file march down center aisle of reserved area to attention in front of platform; audience and speakers stand at attention during presentation; uniformed men at salute.
3:06	- Invocation (at signal and announced by Dr. Sebrell) "The Chaplain of the Senate, the Reverend Dr. Frederick Brown Harris, will now give the invocation" (Audience and speakers still standing)
3:07	- Invocation concluded (audience and speakers still standing) Colors retired, i.e., placed in stands on each side of speakers' platform and men retired behind platform.
	(SEAT GUESTS)
3:08	- Welcoming remarks followed by introduction of Mr. Ewing - Dr. Sebrel
3:11	- Remarks and Introduction of Dr. Bronk - Mr. Ewing
	(SEAT GUESTS)
3:15	- Address by Dr. Bronk
3:22	- Introduction of Dr. Scheele - Mr. Ewing
3:23	- Remarks by Dr. Scheele
	(SEAT GUESTS)

*Based on broadcast from 3:31 to 3:55 and arrival of President at 3:27.

3:27 - Arrival of President (from Georgetown Road entrance -- no action taken)

3:27 - Public appearance of President
Music "Hail to the Chief" by band--audience rises, stands at attention.

3:30 - Introduction of President -- Mr. Ewing

3:31 - Address by President

3:55 - " " " (all - 24 minutes)

3:55--3:57 - Laying of cornerstone by President

3:57-3:58 - Benediction (at signal and announced by Mr. Ewing) "The Chaplain of the House of Representives, the Reverend Dr. Bernard Braskamp, will now pronounced the benediction" (audience and speakers stand)

3:58 - Retirement of President - music - followed at distance by Mr. Ewing, Dr. Scheele, others, after President's acknowledgment to band

3:59 - Band music for five minutes.

6/22/51

HEADQUARTERS FOR PHYSICAL ARRANGEMENTS SUB-COMMITTEES

Physical Arrangements (C. W. May, Chairman) - Rm. 18, Bg. 1, Ext. 422

Transportation (George Van Staden, Chmn.), Rm. 8, Bg. 1, Ext. 2032

Traffic Control & Parking (K.H. Brown, Chmn.), Rm. 18, Bg. 1, Ext. 422

Safety & First Aid (J. B. Black, Chmn.) Rm. 303, Bg. 1, Ext. 511

Food (J. L. Murphy, Chmn.) Rm. 18, Bg. 1, Ext. 422

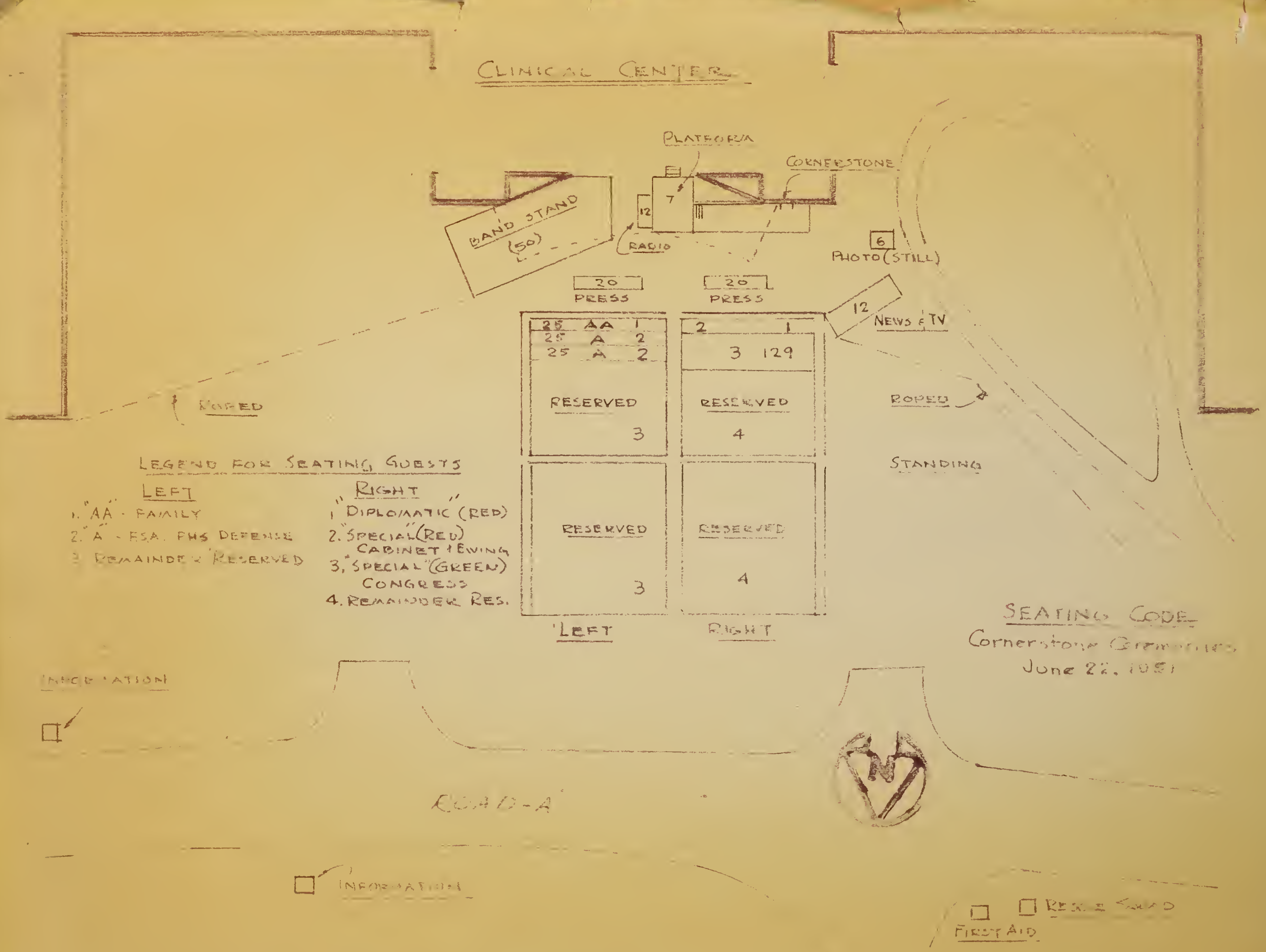
Grounds (H. B. Ragas, Chmn.), Rm. 18, Bg. 1, Ext. 422

Buildings (T.C. Green, Chairman), Rm. 18, Bg. 1, Ext. 422

Special Construction (H. J. Van Houten, Chmn.) Rm. 18, Bg. 1, Ext. 422

Decorations & Furniture (Harry Adams, Chmn.) Rm. 18, Bg. 1, Ext. 422

Electrical (W. F. Harlow, Chmn.), Rm. 18, Bg. 1, Ext. 422



SEATING CODE
Cornerstone Ceremonies
June 22, 1951

LEGEND FOR SEATING GUESTS

LEFT
1. "AA" - FAMILY
2. "A" - FSA. PHS DEFENSE
3. REMAINDER RESERVED

RIGHT
1. "DIPLOMATIC" (RED)
2. "SPECIAL" (RED) CABINET & EWING
3. "SPECIAL" (GREEN) CONGRESS
4. REMAINDER RES.

FEDERAL SECURITY AGENCY
Public Health Service
National Institutes of Health
Bethesda, Maryland

OPEN HOUSE

Friday, June 22, 1951
1 - 9 P.M.

Major Operating Committee

Dr. J. R. Heller, Jr., Chairman
Mr. W. G. Baylis
Dr. Joseph Bobbitt
Mr. Robert Grant
Dr. David Scott
Dr. James Hundley
Dr. Thomas Tomlinson
Mr. E. M. Allen
Bethesda C. of C.

Reception Committee

Miss Rhobia Taylor, Chairman
Mr. Philip Simon, NCI
Mrs. Mabelle Nolan, EMI
Mrs. Dorothy Amos, OD
Miss Zelda Schiffman, OD

RECEPTION COMMITTEE FOR OPEN HOUSE
Administration Building

BUILDING #1	FIRST PERIOD (1:00 - 3:00 P.M.)	SECOND PERIOD (4:15 - 6:30 P.M.)	THIRD PERIOD (6:30 - 9:00 P.M.)
Entrance	Mrs. Evelyn Attix Miss Edna Todd	Mrs. Margaret Tabler Mrs. Dorothy Horlander	Mrs. Florence Hall Mrs. Virginia Hudson
First Floor	Mrs. Mary Anderson Miss Zelda Schiffman Mrs. Margaret Norris Mrs. Jean Easter	Miss Jane Sundelof Miss Cecile Hillyer Miss Betty Jane Gallahan Mrs. Virginia Sullivan Mrs. Susan Scott	Miss Mary Alice Dean Miss Evelyn Gombert Miss Frances Fox Miss Mary Dixon
Second Floor	No Exhibits	No Exhibits	No Exhibits
Third Floor	Mrs. Barbara White	Mrs. Helen Sweat	

Key Persons to contact:
Mrs. Dorothy Amos - Ext. 546
Mrs. Dorothy Murphy - Ext. 546
Miss Vera White - Ext. 546

FIRST AID - Dr. Lynch - Ext. 511

RECEPTION COMMITTEE FOR OPEN HOUSE
National Institute of Arthritis and Metabolic Diseases
Laboratory of Physical Biology

BUILDING #2	FIRST PERIOD (1:00 - 3:00 P.M.)	SECOND PERIOD (4:15 - 6:30 P.M.)	THIRD PERIOD (6:30 - 9:00 P.M.)
Entrance	Miss Lucille Dyson *Mr. Walter Cool	*Mr. Joseph Brown, Jr. Mrs. Barbara Smith	Mrs. Frances Hutchins Miss Persis Griffin
First Floor	Miss Annabel Newhouse Mr. Alan Hough	Mrs. Frances Hutchins Mrs. Blanche Fors	* Miss Carmelia Joy Miss Lucille Dyson
Basement	** Mr. Lawrence Showkeir Mr. Marvin Rowe	** Mr. Rex Heihof Miss Persis Griffin	** Miss Catherine Beane Miss Annabel Newhouse
Second Floor	No Exhibits	No Exhibits	No Exhibits
Third Floor	No Exhibits	No Exhibits	No Exhibits

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* Key person to Contact on First Floor Ext. 315
** Key person to Contant in Basement Ext. 2011

RECEPTION COMMITTEE FOR OPEN HOUSE
National Heart Institute
National Institute of Arthritis and Metabolic Diseases

BUILDING #3	FIRST PERIOD (1:00 - 3:00 P.M.)	SECOND PERIOD (4:15 - 6:30 P.M.)	THIRD PERIOD (6:30 - 9:00 P.M.)
Entrance	Paul Campbell	Elaine Tennant	Ellen MacEwen
First Floor	Mrs. Norma Stotlemeyer * Mrs. Cynthia Risley Miss Rita Gardiner Miss Marjorie Romine	Miss June Post Mrs. Theresa Clary * Mrs. Margaret Custer	* Mrs. Ruth Barbee Mrs. Freda Warren Miss Anna Birch
Second Floor	Amy Cherkes * Bob Burton Agnes McGlone	Helen Elliott Warren T. Choate Alma Bartol Jack Cooper * Carroll Clark Lou Aronow Harriet Hunstiger	Dave Farnsworth Janet Farnsworth * Pat McMahon
Third Floor	No Exhibits	No Exhibits	No Exhibits

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* Key person to contact: Telephone Ext. 2016

RECEPTION COMMITTEE FOR OPEN HOUSE

National Institute of Arthritis and Metabolic Diseases
National Institute of Dental Research

BUILDING #4	FIRST PERIOD (1:00 - 3:00 P.M.)	SECOND PERIOD (4:15 - 6:30 P.M.)	THIRD PERIOD (6:30 - 9:00 P.M.)
Entrance	Miss Barbara A. Zeigler Miss Florence Lansdale	Mrs. Grace Andrito Mrs. Elizabeth Gorney	Mrs. Evelyn Foy Miss Janet Porter
First Floor	* Miss Clarice Lewerenz Miss Mary L. Kunde Mrs. Sally Wilson	* Dr. Laura Stewart Miss Jean Rothenberg Miss Mary Gray	* Mrs. Inda Gathof Mrs. Phyllis Humphries Miss Elizabeth Gorney
Second Floor	No Exhibits	No Exhibits	No Exhibits
Third Floor	No Exhibits	No Exhibits	No Exhibits

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* Key person to Contact: Telpehone Ext. 676

RECEPTION COMMITTEE FOR OPEN HOUSE
National Microbiological Institute

BUILDING #5	FIRST PERIOD (1:00 - 3:00 P.M.)	SECOND PERIOD (4:15 - 6:30 P.M.)	THIRD PERIOD (6:30 - 9:00 P.M.)
Entrance	Dr. Myrna F. Jones Miss Ruth B. Secor	Miss Evelyn L. White Miss Charlotte R. Hoyle	Mr. Jean Herdt Mrs. Marian Robinette
First Floor	* Miss Marjorie Melton	* Miss Helen Wagner	* Mr. George W. Cornwall
Second Floor	No Exhibits	No Exhibits	No Exhibits
Third Floor	Miss Beth Berry	Mr. Thomas F. Probey	Mr. William Berkley

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* Key person to Contact: Telephone Ext. 457

RECEPTION COMMITTEE FOR OPEN HOUSE
National Cancer Institute

BUILDING #6	FIRST PERIOD (1:00 - 3:00 P.M.)	SECOND PERIOD (4:15 - 6:30 P.M.)	THIRD PERIOD (6:30 - 9:00 P.M.)
Entrance	Bessie Haines Marion Matthews	Ruth Stander * Carl White	* James Miller Tamara Voloshin
First Floor	* Ann Sigwald Vivyan Barrett	Sarah Tice Pauline Case	Anita Domingue
Second Floor	No Exhibits	No Exhibits	No Exhibits
Third Floor	Antoinette Greco Mary Jo Streibich	Belle Anderson Cecile Chagnon	Clara Lee Horton Elizabeth Hill

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* Key person to Contact: Telephone Ext. 621

RECEPTION COMMITTEE FOR OPEN HOUSE
National Microbiological Institute

BUILDING #7	FIRST PERIOD 1:00 - 3:00 P.M.	SECOND PERIOD (4:15 - 6:30 PM.)	THIRD PERIOD 6:30 - 9:00 P.M.)
Entrance	* Miss Virginia Burlingame Mrs. Ruth M. Bell	* Mrs. Mary Ray Mrs. Nellie V. Brake	* Mrs. Mary Lou York Mrs. Eleanor Berreckman
First Floor	(Guided tour through the library and Dr. Karl Habel's Unit)		
Second Floor	No Exhibits	No Exhibits	No Exhibits
Third Floor	No Exhibits	No Exhibits	No Exhibits

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* Key person to Contact: Telephone Ext. 343

RECEPTION COMMITTEE FOR OPEN HOUSE
National Cancer Institute

BUILDING #6	FIRST PERIOD (1:00 - 3:00 P.M.)	SECOND PERIOD (4:15 - 6:30 P.M.)	THIRD PERIOD (6:30 - 9:00 P.M.)
Entrance	Annabel Glockler Ira Kline	* Ira Kline Marie Felix	* Wayne Levillain Thomas McKinley
First Floor	Gertrude Greenberg * Dorothea Fitzgerald	Mary Federline Priscilla Maury	Peter J. Boyle John Murphy
Second Floor	No Exhibits	No Exhibits	No Exhibits
Third Floor	No Exhibits	No Exhibits	No Exhibits

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* Key person to Contact: Telephone Ext. 326

We are here today to lay the cornerstone of a building which will be devoted to the service of mankind. The men and women who work in this clinical research center will be striving to save human lives and to prevent human suffering.

That is a noble purpose.

As a people, we have constantly sought better health and longer lives for our citizens. We have done so not merely because human strength and human intelligence are great national assets. Far more important, we believe that there is something sacred about every human soul that God has put on this earth.

We believe in the rights of the individual. We acknowledge his supremacy over the state. That is the great mark of distinction between our democracy and the totalitarian dictatorships. In the totalitarian countries, little value is placed on human life. People are herded into slave labor camps by the millions, and are allowed to die like flies from starvation, or disease, or hardship.

In our country, the government exists to serve the people. Our government is one of the instruments through which people achieve freedom, happiness and the good things of life.

That is true in the field of health as in other parts of our national life. Advances in medical knowledge and medical care in our country have come about through the combined efforts of private individuals and institutions and local, State, and Federal agencies.

This clinical research center will advance the work that is being done by all of us to achieve better health. I am especially glad to participate in these ceremonies, because I believe so strongly in the importance of medical progress. And I know what amazing advances can be made, because I know what has happened in my own lifetime.

At the turn of the century, the average American could expect to live only 49 years. The two biggest killers, pneumonia and tuberculosis, exacted a frightful toll. Diphtheria and typhoid ran wild. We were losing 130 of every thousand babies before they were a year old. Our maternal death rate was very high -- more than six mothers died in childbirth for every thousand babies born. In World War I, 141 American soldiers out of every 10,000 were cut down by disease -- more than were killed by enemy bullets.

Today, many of these scourges have been almost completely eliminated. The death rate from tuberculosis, pneumonia, and other infectious diseases is at the lowest point in medical history. We have reduced infant mortality by more than two-thirds. Our maternal death rate is now less than one mother per one thousand births. The death rate from disease in our Armed Forces in World War II was only about 6 out of every 10,000.

Most remarkable of all, we have extended the average life 18 years in this short half century. The average American baby born this

HOLD FOR RELEASE HOLD FOR RELEASE HOLD FOR RELEASE

CONFIDENTIAL: The following address of the President at the dedication of the National Institutes of Health Clinical Center, Bethesda, Maryland, is for automatic release at 3:30 p.m., E.D.T., Friday, June 22, 1951. No portion, synopsis, or intimation may be published or broadcast before that time.

PLEASE GUARD AGAINST PREMATURE PUBLICATION OR ANNOUNCEMENT.

JOSEPH SHORT
Secretary to the President

We are here today to lay the cornerstone of a building which will be devoted to the service of mankind. The men and women who work in this clinical research center will be striving to save human lives and to prevent human suffering.

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Most remarkable of all, we have extended the average life 18 years in this short half century. The average American baby born this

year can expect to live 67 years -- until the year 2018.

Medical science has won victory after victory over the deadliest diseases of a generation ago. During the first half of the twentieth century, it is safe to say that we successfully conquered the infectious diseases. Now, in the second half of the century, we are facing an even greater challenge -- the battle against the chronic diseases.

Over one million Americans died last year from cancer, heart trouble, diabetes, and other chronic illnesses. As the life span of our people has grown longer, the mortality from these illnesses has risen. Last year, the death rate from heart disease was the highest ever recorded for any single human ailment, and it was 20 per cent higher than 10 years ago. Fifteen per cent more people died of cancer last year than ten years ago.

The most heart-rending of the chronic afflictions, and perhaps the most serious, is mental illness. Over 600 thousand hospital beds -- about 50 per cent of the hospital beds in this country -- are occupied by the mentally ill.

All these chronic illnesses take a tremendous human toll. It is estimated that more than 25,000,000 Americans suffer to some degree from chronic diseases.

Modern medicine must find ways of detecting these diseases in their early stages and of stopping their destructive force. That will be the major work of this clinical research center. There could be no more useful expenditure of the taxpayers' funds.

The center will be operated by the Public Health Service of the Federal Security Agency. It will be the home of one of the greatest groups of scientists ever gathered together for basic and applied medical research.

Basic research has been at the core of the great advances in medicine during the last half-century, and the scientists of the Public Health Service have been in the forefront of this research.

Scientists of the Public Health Service were the first to discover that pellagra was caused by a dietary deficiency, and they devised the means for its prevention and cure. They found the cause of Rocky Mountain spotted fever and how to vaccinate against it. They developed the use of fluorides for the protection of teeth, opening the way to the major reduction of dental decay.

Public health research workers right here at Bethesda developed a vaccine against typhus. Their vaccine has kept our forces in Korea free from typhus, while the North Korean and Chinese communists have suffered seriously from that disease.

The fine record of Public Health Service research workers promises well for the future. This magnificent building will give them many new opportunities to forge ahead in the field of medical discovery. I am particularly glad that one of the wings of the building has been especially designed for work with radioactive materials -- to put to peaceful and constructive use our increasing knowledge of atomic energy.

This clinical research center will not be an isolated enterprise. Research scientists from medical schools, private hospitals, and other private institutions will come here to share in the work. And the Federal Government will continue to make grants-in-aid for medical research in other places. In 1950, the Public Health Service made more than 1,500 research grants totaling about 14 million dollars. These grants went to universities, hospitals and medical schools in every part of the country.

In the last few years, government assistance to medical research has been greatly expanded. At one time, there was a great hue and cry by the viewers-with-alarm that Federal assistance would threaten freedom of research. That wasn't true, of course. The fact is that

the presidents of some of our leading universities have gone on record to the effect that Federal assistance has broadened both the scope and freedom of medical research. Their experience with these research grants is proof that government aid does not mean government control.

Today, there is a growing awareness that medical research needs support from the Federal Government, from State and local governments, and from industry, endowment funds, and private contributions. It will take support from all these sources to give us the rapid progress we need.

At the same time that we are moving forward with medical research, we must drive ahead to translate the new knowledge gained by research into better medical care for more people. Here we have run into difficult problems, but we are making progress.

We have made great strides in the field of public health. The Federal, State and local governments have formed an effective partnership. In 1950, $231,000,000 was spent for State and local public health services. Forty-five million dollars of this was provided by the Federal Government, $96,000,000 by State governments, and $90,000,000 by local governments.

These funds were used by public health doctors and nurses who are in the front lines of the fight against disease -- X-Raying to find tuberculosis, inoculating against diphtheria and typhoid, treating venereal disease, guarding the purity of water and milk supplies, organizing health services for civil defense, and performing a host of other services to protect the health of the American family.

Yet, our present local public health system is woefully inadequate to meet its responsibilities. Thirty-two million Americans live in areas which are not served by full-time public health workers.

I am happy that the United States Senate at its present session has passed legislation to help strengthen and expand the Nation's local public health units in our cities and counties. I hope that the Congress will complete action quickly on this legislation. Stronger local public health units are essential to better health in America.

We are now making good progress in meeting our needs for hospitals and health centers. The projects already approved under the National Hospital Program, started in 1946, will give us 65,000 additional hospital beds and 240 new health centers, with the Federal Government contributing about a third of the cost. These hospitals are being built where they are needed most. Most of them are small hospitals of 50 beds or less, and most of them are located in towns of 10,000 people or less.

Hospitals and research centers are worthless, however, without trained medical personnel to staff them.

In recent years, the education of students in the medical, dental, nursing, and allied professions has not kept pace with the increase in population. These shortages are crippling hospital services all over the country. Less than a month ago, every Washington newspaper carried front page stories on the closing of many hospital beds in this area because of a critical health personnel shortage.

These shortages are being aggravated by the needs of our Armed Forces. Our military medical men are doing a magnificent job in saving lives on the Korean front, but we have had to dip deeply into our medical strength over here to accomplish this.

In order to supply more doctors and nurses, we will have to strengthen and expand our schools. In spite of the best efforts of the medical schools, they have had to turn away thousands of applicants each year. The income of the medical schools has not risen to meet the rising costs of medical education. They are today in the most precarious financial condition in their history. President Hoover, as honorary chairman of the National Fund for Medical Education, pointed out recently that the financial condition of our medical schools is so acute that few can continue even their present programs without large-scale financial aid.

Legislation to remedy this situation is now before the Congress. This legislation will provide emergency Federal aid for five years to tide the schools over the present crisis. The overwhelming majority of the medical school deans support this legislation. It is not intended to replace private sources of support. On the contrary, I am sure it will broaden this support in the same way in which both public and private sources, joined together, have broadened the base and scope of medical research. I hope that the Congress will act on this legislation soon.

Finally, we have the problem of meeting the cost of medical care. The research discoveries which will be made at this clinical center and elsewhere must not be confined to a chosen few, simply because the rest of us cannot afford to use them.

At the present time, most people find it very difficult to pay for medical care. I have been very glad to see the growth of the many private health insurance plans over the last several years. But the plain fact is that they do not meet the problem. They are not reaching the overwhelming majority of low and middle income families.

Less than four million Americans have reasonably complete medical care insurance, and 75 million have no health insurance at all. Skyrocketing medical costs are pushing millions of Americans into the medically indigent class.

Since 1945, I have been proposing to meet this problem by national health insurance. This proposal has generated a great deal of controversy. I still believe it is sound, and that the Nation would be greatly strengthened by its adoption.

I want to make it clear, however, that I am not clinging to any particular plan. What I want is a good workable plan that will enable all Americans to pay for the medical care they need. And I will say here and now that if the people who have been blocking health insurance for five years will come up with a better proposal -- or even one that is almost as good -- I'll go along with them. I want to get the job done, and I am not concerned in the slightest with pride of authorship.

But I am concerned with results. Medical care is for the people and not just for the doctors. Our objective must be to make the best modern medical care available to more and more people. I intend to keep right on working for that.

I have been speaking of the medical needs of our own country. We should never forget, however, the extremely fortunate position we are in compared to the rest of the world.

Throughout the world, almost half the people -- more than one billion men, women and children -- are victims of preventable disease. Millions of them are weakened by malaria. Millions die each year from tuberculosis. Three babies out of every ten die in infancy.

In many parts of the world, the average life expectancy is under 30 years. This means that the average farmer or industrial worker in these countries has but a few years of limited productivity before death.

Obviously, people with such handicaps face immense difficulty in striving for economic and social progress. It is urgently necessary that we help them to learn and put into effect modern medical knowledge and public health methods. This is one of the most important parts of the work we must do under the Point IV program.

We know what can be done. In Western Europe, when World War II ended, disease was rampant and epidemics threatened wide areas. Experts said that 20 years' effort in public health had been lost as a result of the war.

In three years, with our help, the tide was turned. By 1948, death rates in Western Europe were the lowest ever recorded. Tuberculosis, which had spread to an alarming extent, was reduced to a lower level than ever before. Malaria was nearly wiped out as far east as Greece. Typhus and smallpox were gone. The public health work in Europe was more completely successful than the efforts made in any other field of postwar rehabilitation.

Of course, this was done in Europe, where there was a large group of medically trained specialists. We cannot expect such quick results in the underdeveloped areas of the world. They are desperately short of doctors and nurses and health facilities of all kinds. In parts of Iran, for example, there is only one doctor for each 80,000 people. It will take time to remedy these conditions. But progress is being made.

More health technicians are being trained. Last year, thousands of professional health workers came to the United States for training -- they came from the Philippines, Latin America, and many other areas all around the world.

We are also sending our specialists abroad. For example, last year, a team of our public health officers flew to Indo-China and helped the people there plan a campaign against malaria and other serious diseases. Another team spent ten weeks in Iran, showing village physicians and government medical officers how to use vaccines and DDT.

This public health work is the key to improving conditions in the underdeveloped areas. No funds we can spend will bring richer rewards in human progress and in strength for peace. This is recognized by other countries as well as our own, and splendid work is being done in this field by the World Health Organization.

The United States was one of the founding members of the World Health Organization. It is a source of deep satisfaction to me that Surgeon General Scheele of the Public Health Service was elected to the Presidency of its annual Assembly in Geneva a month ago.

As we lay the cornerstone of this clinical center, I see in this structure a symbol of what is finest in our way of life.

The work that is done here in Bethesda will bring life and health to all mankind. This center is a specific and exciting expression of man's humanity to man. It will save the lives and alleviate the suffering of our own children and grandchildren. But, more than that, it will service men of all religions, all races, and all nations -- everywhere in the world.

May it serve for many generations as a monument to our desire for human health and happiness in a world at peace.

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Not for release Background
Information Only.

HISTORY

Ever since the Marine Hospital was established in 1798 to provide medical care for merchant seamen, a steadily increasing share of responsibility for the Nation's health has been shouldered by the Public Health Service. Besides its twenty-four hospitals, it maintains the Nation's only leprosarium and the only hospital in the world devoted solely to the care of drug addicts. The Public Health Service works closely with the various State departments of health in the improvement and extension of general community health services. It contributes to the control of venereal disease, tuberculosis, heart disease, cancer, diabetes, and mental illness. It gives special attention to the problems of industrial hygiene and stream pollution. The care of Eskimos in Alaska, malaria control among the coolies building the Burma Road during World War II, and quarantine control of migrant laborers from Mexico and the Bahamas are representative of the diversity of Service programs in the United States, in its territories, and in foreign lands.

The Public Health Service also maintains one of the largest medical research centers in the United States--the National Institutes of Health, located at Bethesda, Maryland. Here, scientists are studying almost every major disease entity, as well as that fundamental question in both health and disease--how does the body function?

Much of the growth of the National Institutes of Health has come in the past decade. Its scientific tradition, however, runs back to 1887 when a medical officer of the Public Health Service,

Dr. Joseph J. Kinyoun, set up a one-room laboratory in the Marine Hospital at Stapleton, Long Island. Kinyoun, who had studied with Koch and Pasteur, was the first to demonstrate the cholera organism among immigrants arriving in the Port of New York

Since Kinyoun's day, the National Institutes of Health (first known as the Hygienic Laboratory) has made many contributions to improved control of infectious and nutritional diseases, contributions which have helped to add seventeen years to the average life span of the American citizen since 1900.

Some of the accomplishments by National Institutes of Health scientists include: pioneer work on anaphylaxis by Rosenau and Anderson in 1906; the recognition by Goldberger in 1914 that pellagra is a dietary deficiency disease; Francis' discovery in 1919 that a disease called deerfly fever in Utah was, in fact, tularemia, an infection conveyed to humans from diseased jack rabbits by the deerfly; the development of a vaccine for Rocky Mountain spotted fever in 1924; the discovery of new diseases of man such as lymphocytic choriomeningitis, rickettsialpox, and Louisiana pneumonitis; and proof that fluoridated public water supplies can prevent tooth decay in children.

The conquest of communicable diseases is by no means completed. National Institutes of Health scientists are working on such diseases as poliomyelitis, influenza, the common cold, and a wide variety of tropical diseases. In recent years, however, the scope of the research program has expanded to include so-called long-term

diseases—cancer, arthritis, cardio-vascular disease mental disorders, blindness and the neurological diseases such as cerebral palsy, multiple sclerosis and epilepsy.

These are problems confronting the practicing physician and the research scientist everywhere, and here at the National Institutes of Health, as elsewhere, the methods of attack are many. Scientists are seeking new drugs and new techniques of treatment and diagnosis They are searching for the causes of disease and the ways in which diseases act upon the body. Finally, because disease frequently involves not one but many of the body's parts and processes, they are undertaking much basic research simply to learn more about the human organism and its chemical and biological mechanisms.

Throughout the history of medical research, long delays have occurred before laboratory and clinical findings could be evaluated and made available for general use. To help overcome this delay, the Public Health Service has designed a Clinical Center. With its specialized physical facilities and the opportunities it presents to combine clinical and laboratory research, the Clinical Center should speed the solution of many of today's most baffling problems in the long-term illnesses.

NATIONAL MICROBIOLOGICAL INSTITUTE

Although the National Microbiological Institute was not established officially under this name until 1948, its program of research on the infectious diseases reaches back to the very beginning of the National Institutes of Health.

It has also produced many of the scientific achievements for which NIH is noted. Among these are: the development of vaccines for typhus, mumps, and Rocky Mountain spotted fever; a successful treatment for whooping cough; elimination of the paralytic factor from rabies vaccine; and the discovery that the rat flea is the vector of endemic typhus.

Though popular interest in medical research has shifted considerably to the chronic diseases, most of which are not due to infecting organisms, many acute illnesses caused by microorganisms still harrass man. Poliomyelitis, influenza, tuberculosis, the common cold, diarrheal and rickettsial diseases - these are some of the diseases which scientists of the Laboratory of Infectious Diseases (one of the four Microbiological Institute laboratories) are now studying.

How can the several strains of poliomyelitis virus be grown in experimental animals so that the disease may be studied more effectively? What nutritional factors govern susceptibility to amebiasis? How can a vaccine effective against the two main groups of influenza virus be developed? And, from a more fundamental point

of view, what is the relationship of viruses to host-cell metabolism and to the mechanisms of virus multiplication? Such questions as these become research projects in the National Microbiological Institute.

The phenomenon of immunity is central to almost every problem of the Infectious Disease Laboratory, as it is to virtually every laboratory working in this field.

Much work - in the Laboratory of Tropical Diseases - centers on those diseases affecting hundreds of millions of people in tropical countries - malaria, schistosomiasis, onchocerciasis, filariasis, and trypanosomiasis. These are problems which also concern the people of this country deeply. Damage done the tropical economies affects the state of business and industry in the United States. The United States must also be ready for any contingency which may call upon its citizens or soldiers to operate in tropical areas. Finally, there is always the possibility that certain tropical diseases may invade this nation.

More effective protection against tropical diseases involves investigation into such problems as diagnostic procedures for parasitic diseases; the development of immunologic tests; fundamental research into the cytology, metabolic activities, and enzyme systems of parasites and parasite vectors; the development of new drugs, new methods of treatment, and studies on how drugs act against disease.

Beyond the investigation of factors which will permit successful control of the tropical diseases, the Laboratory of Tropical Diseases must consider the educational and economic levels of impoverished countries where control methods must be simple, inexpensive, and acceptable to the peoples affected. To develop techniques which meet both these as well as general medical needs, the Microbiological Institute maintains field installations in several areas of the United States, in the Pacific Islands, in Central and South America, and in tropical Africa.

In the field, the basic researcher becomes the clinical investigator. More than any other group at NIH, perhaps, Microbiological Institute scientists have been called on personally to fight actual disease epidemics. In 1946, for example, when a mysterious illness broke out on Long Island, staff members of the Laboratory of Infectious Diseases were asked to investigate by the New York State Department of Health. They identified the new disease as rickettsialpox, found the animal reservoir, and identified a mite as the transmitting agent. Again, in 1937, it was a Microbiological Institute scientist who found a particular species of tick harbored the rickettsial germs which caused 9-mile fever - a disease later found to be identical with Q fever. In 1947, Microbiology's scientists discovered that Q fever could be contracted through drinking raw milk or breathing the air of barns housing infected cattle.

At Hamilton, Montana, where the National Institutes of Health maintains its largest permanent field station - the Rocky Mountain Laboratory - scientists specialize in the study of arthropod-borne diseases. Scientists there are working on the natural history of disease in animals and birds, securing data on medical entomology, and maintaining a close watch on the spread of these diseases among humans.

Should biological warfare ever become a reality, scientists in the Microbiological Institute would be an important source of knowledge and manpower to back the nation's defense. In preparation for such an eventuality, these scientists have already taken preliminary steps to define what organisms might be used in biological warfare, how they might be disseminated, and what protective measures are necessary.

Not the least of this Institute's functions is its role as monitor of the nation's biological products. No commercial vaccine, toxin, or antitoxin reaches the corner drug store or is exported out of the country unless it meets the Federal Government's rigid requirements for the safety, purity, and potency of these products. These requirements are prescribed in regulations made jointly by the Surgeons General of the Public Health Service, the Army, and the Navy. The Biologics Control Laboratory enforces these regulations. Its officers regularly inspect manufacturing laboratories and plants in this country and abroad which produce

blood derivatives, chemotherapeutic serums, antitoxins, and similar biological products used in this country for the prevention or treatment of diseases or injuries of man.

The Biologics Control Laboratory has also developed some of these products. Present work, for example, designed to both speed and purify the production of blood plasma, shows promise that future plasma transfusion will be safe from the dangers of hepatitis infection and other impurities, and that plasma can be sterilized much more rapidly than has hitherto been possible.

NATIONAL INSTITUTE OF ARTHRITIS AND METABOLIC DISEASES

When the National Institute of Arthritis and Metabolic Diseases was established in 1950, the Experimental Biology and Medicine Institute was abolished and its activities transferred to the new Institute

The National Institute of Arthritis and Metabolic Diseases thus inherits the record of achievements made by its predecessor--such findings as the cause and cure of pellagra and riboflavinosis, the discovery that ordinary saline solution holds great promise as an effective emergency treatment for shock, the development of synthetic drugs as effective as morphine and codeine in the relief of pain

Though NIAMD has made noteworthy contributions to the treatment of specific abnormal conditions in man, it is largely for their basic research that the laboratories of this organization are known. The laboratory studying sugar chemistry, for example, has been a world focal point for such investigations for over two decades. Laboratory of Physical Biology scientists have played a considerable role in the development of electron microscopy as a tool for observing microorganisms never seen before, for determining the methods by which viruses multiply and develop, and for studying the ultramicroscopic structure of cells and organisms.

From such studies--and from studies on the relationship between cellular metabolism and enzymic catalysis, the biochemistry of muscle contraction, and the metabolism of fats, proteins and carbohydrates--comes our slow documentation of how the whole man functions and thereby how he grows ill, grows old, and dies.

The ultimate purpose of this basic research is new knowledge about particular diseases or about general life processes. Either approach can yield practical contributions to medicine and public health. NIAMD's chemists, for example, are working on the synthesis of cortisone and other steroids for the treatment of arthritis and rheumatic fever. However, basic research on the general rôle of the endocrine glands may also throw light not only on treatment of these diseases ~~ane~~ and many others but also on the means for preventing their occurrence. It is this balanced approach, whereby a wide diversity of disciplines ~~and~~ are employed directly to the stubborn metabolic diseases and less directly to the general life processes responsible for both disease and health, which characterizes this Institute's research program.

This balance is amply illustrated by NIAMD's Laboratory of Biochemistry and Nutrition, one of the four major laboratories which encompass NIAMD's research program. The "practical attack" made by its nutritionists involves such studies as the effect of vitamin deficiencies on peptic ulcer; the effect of vitamins on degenerative diseases of the liver, especially cirrhosis of the liver; the relationship of various nutritional elements to the growth of gray hair in animals. On a more general basis, nutritionists are studying the influence of hormones in governing the disposition of food in the body and are trying to determine substances which are necessary for the production and proper function of red and white blood cells.

Like all the Institutes, NIAMD is helping prepare for the nation's defense. The development of synthetic pain-relieving drugs, for example, has made the United States potentially independent of the importation of opium and its principal derivatives, morphine and codeine,from the Orient. NIAMD radiation researchers have provided practical counsel to the Government concerning safety procedures against the dangers of atomic radiation; and in the laboratory, these scientists are studying the effectiveness of a variety of materials in treating the effects of radiation itself. Further studies are going forward on the value of emergency use of saline solution as a plasma substitute in cases of shock due to burn--part of a larger investigation into the whole field of plasma and blood substitutes for treatment of burn, shock, and hemorrhage, all problems of enormous importance in the event of large-scale bombing attacks on our cities.

NATIONAL CANCER INSTITUTE

The structure and reproduction of cells, the chemical activity of cellular components, the role of endocrine glands and their secretions, the reaction of cells to viruses, the effects of radiation on cells--these are typical of the investigations now under way in the National Cancer Institute.

These are cancer problems, but they are also general problems in basic science as well--problems that concern the biologist, pathologist, endocrinologist, biochemist, physiologist, biophysicist, virologist, and cytologist. Because the discovery of cancer "causes" is so elusive and the development of cancer "cures" so difficult, the attack on this disease must be pressed at every point where a clue is indicated. Certain viruses create specific tumors in animals, some cancers are accompanied by certain endocrine disturbances, and cancer in certain animals displays hereditary characteristics. The possibilities for finding the cause and more effective treatment of cancer, therefore, depend on examining these and a wide variety of other questions about the basic processes of life.

The study of cancer is also direct. Scientists of the National Cancer Institute are engaged in the synthesis and testing of chemicals and compounds which might destroy malignant tissue. At the same time they are searching for chemicals or compounds which might be responsible for the abnormal cell growth that we call cancer. Further, they are working on the development of methods by which cancer can be more quickly and surely diagnosed.

These new problems are far from simple. They involve such preliminary questions as: how to induce specific cancers in animals; how to observe the progress of cancer; how to isolate cancer cells from normal tissue. The solution to these problems, largely of laboratory technique, will determine to a great extent the next searching moves more directly related to cancer in the human being.

Since its establishment in 1937, the National Cancer Institute has made important contributions toward an understanding of the cancer enigma in its various aspects. The Institute's investigators have screened, from more than 3,000 compounds, some fifty chemicals which have destructive effects in tumors in mice and in a few instances have shown limited success on humans with advanced cancer. Institute investigators were responsible for first producing experimental gastrointestinal cancer in animals, and for first transforming normal mammalian cells into cancer cells that would invade and kill animals of the same genetic strain as those from which the cells originally came.

Investigators in the Cancer Institute have cultured large masses of living tissue from a single cell, assuring scientists of an entire culture of uniform type, and enabling them to study cell behavior without the confusing presence of normal or foreign cells/ Through chromatography, Cancer Institute scientists have further developed a new method of purifying and isolating viruses and cell particles.

Though developments in the treatment of cancer have been slow, progress has been such that where early diagnosis can be made, either surgical or radiation treatment, or a combination of these, can be effective. Advanced and inoperable cases have also benefited from hormone treatments and chemotherapy.

To help reduce ~~the incidence of~~ cancer mortality, the National Cancer Institute maintains a control program whose double purpose is both to create public and professional awareness of present cancer knowledge and to improve cancer services for diagnosis and treatment. This program has done much to lead the cancer patient to the clinic early and to provide him with good medical attention when he gets there.

The control program falls into five general categories: grants to states to help support their cancer control activities; grants to institutions and individuals for special studies, such as the evaluation and development of cancer diagnostic tests; grants to medical schools and other professional schools and institutions to improve or initiate special cancer instruction programs; traineeships to physicians for advanced study; and an educational and informational program for the medical profession and the general public through such media as films, manuals, and exhibits.

When ultimately a simple and easy diagnostic test is developed for mass use, when better treatments or cures for cancer are found, such a program as this will become even more essential. As tuberculosis, when diagnosed early, can be successfully treated with streptomycin,

and other antibiotics, so with cancer, the success of surgery, x-ray, hormone treatment and other as yet unknown modes of treatment will depend on early awareness of the disease by both patient and physician.

NATIONAL INSTITUTE OF DENTAL RESEARCH

In 1931, it was observed that in certain areas the natural occurrence of fluorine in drinking water was responsible for the mottled enamel of teeth. Only seven years later, a Public Health Service dental research worker discovered that this same fluorine might also provide partial protection against tooth decay Thus began a painstaking course of investigation which is now leading to public adoption of artificial fluoridation of water supply systems for the partial control of dental caries in children.

The series of achievements which has led to adoption of these practical measures in over fifty cities is for the most part due to the experimental work of scientists of the National Institute of Dental Research. The problems have been many. At what fluorine concentration would a maximum protection against decay be provided and at the same time guard against fluorosis or mottled enamel? The answer: one part fluorine to a million parts of water. What harmful side effects might fluorine in this concentration have on the body? The answer: none. To what degree does fluorine actually halt the process of tooth decay?

All the answers to this last question are not yet in. An extensive study is being conducted by the Public Health Service at Grand Rapids, Michigan. Now nearing the halfway mark of a ten to fifteen year trial, it has been found that among older children, whose teeth were already formed when the water fluoridation began, tooth decay has been reduced by 20 to 25 percent, while in younger children,

whose teeth were formed after fluoridation had begun, there was a 60 percent reduction of caries.

Whether artificial fluoridation also protects adults against tooth decay awaits the trial of time. Dental investigators have, however, thoroughly examined one area where natural fluoridation occurs and have found that life-long inhabitants have incurred considerably less tooth decay than adults elsewhere.

In the control of tooth decay, fluoridation is only a partial answer. The final answer must come through better understanding of the normal structure of teeth and all the various factors which may determine tooth pathology. It is this principle which governs a wide variety of investigations in dental bacteriology, histology, and chemistry.

Dental researchers, therefore, are exploring the organic framework of enamel and dentine with the electron microscope; studying the organic components of saliva and the reaction of teeth to various chemical agents. They are studying and classifying the lactobacilli (the acid-forming bacteria of the mouth) and investigating the relation of oral bacterial metabolism to dental caries--which has already shown interesting results, especially the finding that certain fatty acids may have an inhibitory effect on the caries process.

While dental research workers have begun the investigation of the periodontal or degenerative dental diseases, such as gingivitis and

pyorrhea, a full-scale program has been hampered by several factors, particularly the slow expansion of dental research itself and the dearth of trained dental investigators. In its planning for the near future, both through grants-in-aid and through research in its own laboratories, the Dental Research Institute will hope to provide for intensified research in these relatively unexplored fields.

NATIONAL INSTITUTE OF MENTAL HEALTH

To the man, woman or child who suffers from severe psychological or emotional pressures--the man who can't keep a job, the woman who suffers from imaginary illnesses, the child with a record of bad behavior--for these, local mental health programs frequently provide invaluable aid.

Through guidance given by its psychiatrists, psychologists, nurses, and social workers, through lectures and through close contact with teachers and parents, these community programs have often been able to prevent an individual with emotional problems from becoming one of the serious cases of mental maladjustment which now fill half the hospital beds in America.

To help expand these programs where they already exist and to help initiate them where not yet established (almost half the States did not have them in 1946), the Mental Health Institute grants funds to the States and provides them with consultation services. Since there is a serious shortage of highly trained specialists--psychiatrists, clinical ~~clinical~~ psychologists, psychiatric social workers, and nurses--the Mental Health Institute also makes grants to non-Federal institutions for increasing their training and educational facilities in these fields and to assist promising students to continue their studies or research.

Control of almost any disease depends on several factors. Important among these are specific scientific knowledge concerning causes and treatment and public knowledge that preventive measures

and treatment are necessary and available.

The latter presents special difficulties with respect to mental disease. Because people regard mental illness with more embarrassment than most "organic" disorders or because many people do not know that positive steps can be taken to promote good mental health, they do not seek treatment until it is too late.

It is for this reason that mental health scientists working at the Mental Health Center in Phoenix, Arizona, are trying to assess the mental health status of a typical community, to study the factors contributing to mental health problems, and to gain an understanding of the feeling of the local population regarding these problems and how they should be met.

By maintaining an extensive information program through films, publications and other media, the Mental Health Institute attempts to acquaint the public with such facts as already have been assembled concerning the causes and control of emotional and mental disturbances.

In order to extend this knowledge far beyond its present boundaries the Mental Health Institute maintains a constantly expanding research program.

This program, diversified in scope, is still small in volume--largely due to limited facilities at Bethesda--a problem which will be lessened by the opening of the Clinical Center in 1953.

This Institute has already initiated a series of experimental neurophysiological studies on the convulsive disorders. One such

study has indicated that impairment of the outer membrane of the brain is a factor of importance in causing transient paralysis--a finding significant in determining the cause of epilepsy.

By maintaining cooperative projects with other institutions, the Mental Health Institute has been able to enlarge its operations. At the Worcester Foundation for Experimental Biology, for example, mental health scientists are attempting to track down important physiological clues to the cause of schizophrenia--with particular emphasis on the interrelationship between hormonal imbalance and mental illness. At the Public Health Service's hospital at Lexington, Kentucky, Mental Health Institute scientists have had an opportunity to use as volunteer clinical subjects drug addicts who have violated the Federal Narcotics Act and who are serving their sentences at this hospital. Drug and barbiturate addiction has received intensive investigation in this manner.

At Lexington, Mental Health scientists have made some of their most noteworthy research contributions. They established clinical proof that the synthetic drug, methadone, is a satisfactory substitute for morphine in the relief of pain and developed acetylmethadol, which minimizes the discomfort and dangers of morphine withdrawal from addicts. This group has also demonstrated that some of the widely used barbiturates are truly addicting, with abrupt withdrawal resulting in serious physical reactions, including convulsions and temporary psychoses.

NATIONAL INSTITUTE OF NEUROLOGICAL DISEASES AND BLINDNESS

Only in recent years have the general public and the medical profession become fully aware of the widespread incidence of a number of serious neurological diseases, such as multiple sclerosis, cerebral palsy, and epilepsy. Along with blindness, it is estimated that these almost totally disabling conditions affect more than two million people in the United States.

Investigations on various problems relating to the neurological diseases and blindness have been conducted for some time by several of the Institutes,both directly and through research grants to scientists in other places. Authorization by the Congress in 1950 of a special National Institute for Neutrological Diseases and Blindness will permit these investigations to be broadened and intensified.

Because the long-term basic research program of this Institute will closely parallel in many respects the basic research program of the National Institute of Mental Health, especially with their related interest in problems of neurophysiology, a single scientific director will guide a coordinated laboratory program for both Institutes.

Plans for a research program in the Bethesda laboratories and Clinical Center were begun as soon as the Institute was established. Some grants previously supported by the National Institute of Mental Health were assumed by the new Institute, and through the Advisory

Council of the Neurological Institute, new grants were approved and awarded.

Typical of the studies aided by these grants are: an investigation of the physiology and therapy of convulsive disorders; a study on the growth and regeneration of nerves; an analysis of some regulative mechanisms in neural integration; a clinical and pathological study of the neurological disturbances associated with severe liver diseases; and a study of the nutrition and metabolism of the avascular structures of the eye.

When the National Institute of Neurological Diseases and Blindness is in full operation, a basic research program similar in scope to these grants investigations will be conducted in its own laboratories. And the Clinical Center will provide facilities for a new approach to neurological diseases such as epilepsy, multiple sclerosis, and cerebral palsy, as well as to diseases which cause blindness, such as glaucoma and cataracts.

NATIONAL HEART INSTITUTE

Heart disease is a generic term which embraces more than twenty types of cardiovascular illness; however, only three major forms-- rheumatic heart disease, hypertensive heart disease, and arteriosclerotic heart disease-- are responsible for 90 percent of all cardiovascular disturbances. It is chiefly on these three diseases, which affect almost 10 million people in the United States alone, that the National Heart Institute concentrates its efforts.

Largely because relatively little laboratory space was available when the heart research program was initiated at the National Institutes of Health in 1949, many studies at present are conducted at other institutions.

The Section on Gerontology, for example, which is studying psychological and physiological factors in the aging process, is located at the Baltimore City Hospitals. And in the same city, but at the Public Health Service Marine Hospital, is the Heart Institute's Clinic of General Medicine and Experimental Therapeutics. There are also small groups of Heart Institute scientists working on other cooperative projects with several universities throughout the country.

Though the program is widely dispersed geographically, provision has been made for close integration of clinical and basic research. How successful this integration can be is well illustrated by several recent projects--especially the development of a new drug, procaine amide, which has proved successful in stopping irregular, severe, out-or-rhythm heart beat which is a sometimes fatal development following many heart attacks.

Synthesized by the basic research section on Chemical Pharmacology in cooperation with other scientists, procaine amide was tested clinically by the Institute's Clinic of General Medicine and Experimental Therapeutics in Baltimore and at other institutions. It proved not only to be of value against heart arrhythmias, but also showed promise for use as routine therapy for myocardial infarction--critical injury of the heart tissue caused by a blood clot blocking vital circulation in the heart muscle itself.

In the same way, other achievements by Heart Institute scientists have been facilitated by the interchange of information between cooperating basic and clinical research laboratories. Typical of these are the establishment of criteria for better clot-preventing drugs and the development of the electrokymograph as a research tool with potentialities as an aid for making early diagnosis of various heart conditions.

In another way, the Heart Institute has not only made good research use of the fundamental interdependence of basic and clinical research, but also of the interdependence of research in the various diseases. For example, the Heart Institute's Clinic of Gerontology is working in close cooperation with psychiatrists of the Mental Health Institute in order to establish the relationship between physical and psychological deterioration. Similarly, scientists working on rheumatic fever are intimately concerned with not only cardiovascular aspects of this disease but psychological and microbiological factors as well.

In the Heart Institute's project at Framingham, Massachusetts, all causative factors which might produce heart disease are being investigated. Designed to measure both constitutional and conditioning elements which possibly precede cardiovascular disturbances, this study will involve several thousand persons over a long period of years.

The same broad application applies to many other investigations the Heart Institute is making, such as studies on general metabolism, kidney and electrolyte metabolism, the autonomic nervous system, and cellular physiology. These studies will provide investigators in other fields the same kind of invaluable clues for their work as they will for heart research.

CLINICAL CENTER

Inadequacy of scientific communication has frequently impeded medical progress. Even when clinical evaluations rapidly follow significant laboratory findings, initial results may not be conclusive, and more time is lost before contributions of perhaps several investigators in different institutions confirm or invalidate the original findings.

The means of helping to bridge this gap and also of further coordinating the attack on cancer, heart, mental, neurological, and metabolic diseases is now nearing realization at the National Institutes of Health. The Public Health Service's 500-bed Clinical Center, to be completed late in 1952, is designed to provide opportunities for a unified approach to clinical and basic research.

The Clinical Center is distinctive as a research institution. in that it provides twice as much laboratory space as bed space. The concept of clinical research coordinated with basic investigation is carried out by the specific allocations of both bed and laboratory space to the study of specific diseases and by the proximity and close working relationship of these areas on each floor of the Clinical Center.

Both for the patient who has entered the Clinical Center and for the professional people who care for him, the right of the patient to receive the best possible treatment and to be cured if possible is of primary importance. There is, however, one major condition for a patient's admission to the Clinical Center: patients will be admitted only when they meet the diagnostic requirements of a particular disease

condition under study at a given time in one of the several Institutes. A cancer patient at the Clinical Center will be one of a group of cancer patients admitted on the basis of a common diagnosis which meets specific criteria such as the type of cancer, duration prior to diagnosis, sex, age, and weight. These criteria are necessary in order to eliminate the variables which otherwise might hamper research procedure or invalidate its results. The control groups will be assembled through the cooperation of hospitals and private physicians, both in the local area and from all over the country.

After a patient has been admitted to the Clinical Center, the resources, the equipment, and personnel of the most modern of hospitals will be at his disposal. Available to him, according to his needs, will be medical, psychiatric, and surgical care; nursing, nutritional, and social services; rehabilitation, spiritual ministry, and recreational therapy.

Every effort will be made to keep each patient's own physician informed of progress and results of treatment. Special cooperative relationships will be developed with hospitals and health agencies for the referral of patients suitable for study and for their care after discharge. The resources of the patient's home community will, of course, be utilized for convalescent or nursing home care as indicated and for necessary services to his family.

Working together at the Clinical Center to improve existing methods of diagnosis and treatment and to determine the causes of the

diseases under study will be both clinician and laboratory investigator - the clinician availing himself of the latest findings tested and approved in the laboratory, the laboratory workers following down the clues obtained by the clinician.

This close relationship not only represents a linking of basic with clinical research, but more informally provides that stimulus which is inherent in different points of view focused on a common interest. This reciprocity - whether it occurs in the laboratory, the lecture hall, or at the luncheon table - will exist not only between laboratory and clinical researchers and those responsible for patient care, but among the various basic disciplines as well.

While the Clinical Center will function as a unit, the planning and operation of the research will be the responsibility of each institute which has been allocated bed and laboratory space. Such planning need not be restricted, since the Clinical Center has been designed with both structural and organizational flexibility to meet the changes that are constantly taking place in medical and hospital practice and scientific research. Once the planning for the project has been made, the research team is formed, the problems coordinated, and arrangement for incoming patients is begun.

To make these special research resources available to scientists everywhere and to further aid scientific communication,the Clinical Center plans to maintain a visiting scientist program. On appropriate occasion, the National Institutes of Health will invite outstanding

scientists not connected with the Federal Government to make use of the resources of the Clinical Center for the pursuit of special studies of their own selection which promise to be of importance to medical research.

RESEARCH GRANTS

In addition to research in its own laboratories, the Public Health Service conducts a far-reaching program of aid to medical and biological research in universities, medical schools and other non-Governmental institutions. The purposes of the program are to help maintain research projects already in existence, to encourage investigators to undertake research in neglected areas, and to stimulate increased research in small colleges where programs have been limited.

In its administration of the grants program, the National Institutes of Health is guided by seven National Advisory Councils,[1] each of which includes twelve outstanding non-Federal scientists, physicians and leaders in public affairs. Each Council reviews all applications for grants in its special research field and makes its recommendations to the Surgeon General of the Public Health Service for final approval. The Councils, whose members represent a broad area of scientific and public interest, serve as a connecting link between the research programs of Government and private institutions, that they may better serve the research needs of the nation.

The scope of the grants program is indicated by the fact that in 1950 alone, almost 14 million dollars were granted to non-Federal

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[1] National Advisory Cancer Council
National Advisory Mental Health Council
National Advisery Heart Council
National Advisory Dental Research Council
National Advisory Arthritis and Metabolic Diseases Council
National Advisory Neurological Diseases and Blindness Council
National Advisory Health Council (This Council is responsible for reviewing grant applications in research areas not covered by the other Advisory Councils.)

investigators in almost every state. These funds included support of approximately 25 percent of all research conducted in the medical schools of the Nation.

A large number of important scientific discoveries have been made under the grants program. In the year 1950, for example, some of the promising clinical contributions made by investigators supported wholly or partially by Public Health Service grants included: the development of a method for storing red blood cells for several months longer than has hitherto been possible; the development of a more effective treatment for tuberculosis in children; the development of superior anti-malarial drugs and of a treatment drug for peptic ulcer (Banthine); the development of a photoflurographic camera for the diagnosis of gastric cancer; the further development of means for making blood vessel grafts, articular replacements and corneal grafts.

In judging projects which warrant support, the Public Health Service and the Advisory Councils are aided by two consultant groups.

(1) The seventeen[2] study sections, each composed of a group of experts in a specialized field, are drawn from leading research

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[2] Biochemistry and Nutrition
Cardiovascular
Dental
Environmental Health
Experimental Therapeutics
Hematology
Mental Health
Microbiology and Immunology
Metabolism and Endocrinology
Morphology and Genetics
Pathology
Pharmacology
Physiology
Public Health
Surgery
Tropical Medicine
Virus and Rickettsial

institutions all across the country. These specialists review all applications in their field; recommend them for approval, modification, further study, or disapproval; and also survey the status of research in order to determine areas where special investigations might be initiated or developed.

(2) The Research Grants Branches of the respective Institutes further review applications for their relationship to each Institute's program and assign priorities.

Scientific freedom is a guiding principle in this program. Once a grant has been made, the investigator is not subjected to regimentation or interference. At any point he is free to turn off the main road in order to track down the promising but unexpected lead which so often points the way to important scientific discovery.

Most research grant applications are initiated by individual scientists for projects which range across practically every important disease and every type of scientific problem encountered in medical research. In addition, as national needs arise, the Public Health Service may organize large-scale programs of research grants in specific areas. For example, with a special Congressional allocation of $2,300,000 in 1950, the Public Health Service supported a variety of investigations on ACTH and cortisone to obtain as rapidly as possible more precise knowledge of the value of these compounds in the treatment of many different diseases, to determine proper dosage schedules, to discover how to synthesize them or

otherwise increase their availability. Many projects under this special program were devoted to understanding the total function of the pituitary and the adrenal cortex because of the new clues they hold to the study of health and disease.

The Division of Research Grants of the National Institutes of Health administers the grants programs. It also is responsible for administering the Public Health Service's fellowships program--under which, in 1950, more than $1,500,000 was spent to assist 470 fellows. This program, allocating $1600 yearly to the masters'-level fellowship, $3000 to post-doctorates, and higher stipends for special fellows, is a double guarantee that the most promising students in scientific research will be able to continue their development and that the nation will have available a continuing supply of medical research manpower in both war and peace.

Applicants for fellowships are carefully screened by two special Public Health Service boards: a Central Qualifications Board, which makes preliminary recommendations, and a Special Fellowships Board for each Institute. Applicants are reviewed on the basis of already demonstrated ability, including class status and laboratory work.

The Nation-wide program of the National Institutes of Health in support of medical research is broader than research grants and fellowships alone. Several of the Institutes are also authorized to award grants and provide technical assistance for the initiation and improvement of teaching programs, for training of specialized medical and scientific personnel, and for construction of research facilities.

Not for release. Background Information only.

HISTORY

Ever since the Marine Hospital was established in 1798 to provide medical care for merchant seamen, a steadily increasing share of responsibility for the Nation's health has been shouldered by the Public Health Service. Besides its twenty-four hospitals, it maintains the Nation's only leprosarium and the only hospital in the world devoted solely to the care of drug addicts. The Public Health Service works closely with the various State departments of health in the improvement and extension of general community health services. It contributes to the control of venereal disease, tuberculosis, heart disease, cancer, diabetes, and mental illness. It gives special attention to the problems of industrial hygiene and stream pollution. The care of Eskimos in Alaska, malaria control among the coolies building the Burma Road during World War II, and quarantine control of migrant laborers from Mexico and the Bahamas are representative of the diversity of Service programs in the United States, in its territories, and in foreign lands.

The Public Health Service also maintains one of the largest medical research centers in the United States--the National Institutes of Health, located at Bethesda, Maryland. Here, scientists are studying almost every major disease entity, as well as that fundamental question in both health and disease--how does the body function?

Much of the growth of the National Institutes of Health has come in the past decade. Its scientific tradition, however, runs back to 1887 when a medical officer of the Public Health Service,

Dr. Joseph J. Kinyoun, set up a one-room laboratory in the Marine Hospital at Stapleton, Long Island. Kinyoun, who had studied with Koch and Pasteur, was the first to demonstrate the cholera organism among immigrants arriving in the Port of New York

Since Kinyoun's day, the National Institutes of Health (first known as the Hygienic Laboratory) has made many contributions to improved control of infectious and nutritional diseases, contributions which have helped to add seventeen years to the average life span of the American citizen since 1900.

Some of the accomplishments by National Institutes of Health scientists include: pioneer work on anaphylaxis by Rosenau and Anderson in 1906; the recognition by Goldberger in 1914 that pellagra is a dietary deficiency disease; Francis' discovery in 1919 that a disease called deerfly fever in Utah was, in fact, tularemia, an infection conveyed to humans from diseased jack rabbits by the deerfly; the development of a vaccine for Rocky Mountain spotted fever in 1924; the discovery of new diseases of man such as lymphocytic choriomeningitis, rickettsialpox, and Louisiana pneumonitis; and proof that fluoridated public water supplies can prevent tooth decay in children.

The conquest of communicable diseases is by no means completed National Institutes of Health scientists are working on such diseases as poliomyelitis, influenza, the common cold, and a wide variety of tropical diseases. In recent years, however, the scope of the research program has expanded to include so-called long-term

diseases—cancer, arthritis, cardio-vascular disease, mental disorders, blindness, and the neurological diseases such as cerebral palsy, multiple sclerosis and epilepsy.

These are problems confronting the practicing physician and the research scientist everywhere, and here at the National Institutes of Health, as elsewhere, the methods of attack are many. Scientists are seeking new drugs and new techniques of treatment and diagnosis They are searching for the causes of disease and the ways in which diseases act upon the body. Finally, because disease frequently involves not one but many of the body's parts and processes, they are undertaking much basic research simply to learn more about the human organism and its chemical and biological mechanisms.

Throughout the history of medical research, long delays have occurred before laboratory and clinical findings could be evaluated and made available for general use. To help overcome this delay, the Public Health Service has designed a Clinical Center. With its specialized physical facilities and the opportunities it presents to combine clinical and laboratory research, the Clinical Center should speed the solution of many of today's most baffling problems in the long-term illnesses.

NATIONAL MICROBIOLOGICAL INSTITUTE

Although the National Microbiological Institute was not established officially under this name until 1948, its program of research on the infectious diseases reaches back to the very beginning of the National Institutes of Health.

It has also produced many of the scientific achievements for which NIH is noted. Among these are: the development of vaccines for typhus, mumps, and Rocky Mountain spotted fever; a successful treatment for whooping cough; elimination of the paralytic factor from rabies vaccine; and the discovery that the rat flea is the vector of endemic typhus.

Though popular interest in medical research has shifted considerably to the chronic diseases, most of which are not due to infecting organisms, many acute illnesses caused by microorganisms still harrass man. Poliomyelitis, influenza, tuberculosis, the common cold, diarrheal and rickettsial diseases - these are some of the diseases which scientists of the Laboratory of Infectious Diseases (one of the four Microbiological Institute laboratories) are now studying.

How can the several strains of poliomyelitis virus be grown in experimental animals so that the disease may be studied more effectively? What nutritional factors govern susceptibility to amebiasis? How can a vaccine effective against the two main groups of influenza virus be developed? And, from a more fundamental point

of view, what is the relationship of viruses to host-cell metabolism and to the mechanisms of virus multiplication? Such questions as these become research projects in the National Microbiological Institute.

The phenomenon of immunity is central to almost every problem of the Infectious Disease Laboratory, as it is to virtually every laboratory working in this field.

Much work - in the Laboratory of Tropical Diseases - centers on those diseases affecting hundreds of millions of people in tropical countries - malaria, schistosomiasis, onchocerciasis, filariasis, and trypanosomiasis. These are problems which also concern the people of this country deeply. Damage done the tropical economies affects the state of business and industry in the United States. The United States must also be ready for any contingency which may call upon its citizens or soldiers to operate in tropical areas. Finally, there is always the possibility that certain tropical diseases may invade this nation.

More effective protection against tropical diseases involves investigation into such problems as diagnostic procedures for parasitic diseases; the development of immunologic tests; fundamental research into the cytology, metabolic activities, and enzyme systems of parasites and parasite vectors; the development of new drugs, new methods of treatment, and studies on how drugs act against disease.

Beyond the investigation of factors which will permit successful control of the tropical diseases, the Laboratory of Tropical Diseases must consider the educational and economic levels of impoverished countries where control methods must be simple, inexpensive, and acceptable to the peoples affected. To develop techniques which meet both these as well as general medical needs, the Microbiological Institute maintains field installations in several areas of the United States, in the Pacific Islands, in Central and South America, and in tropical Africa.

In the field, the basic researcher becomes the clinical investigator. More than any other group at NIH, perhaps, Microbiological Institute scientists have been called on personally to fight actual disease epidemics. In 1946, for example, when a mysterious illness broke out on Long Island, staff members of the Laboratory of Infectious Diseases were asked to investigate by the New York State Department of Health. They identified the new disease as rickettsialpox, found the animal reservoir, and identified a mite as the transmitting agent. Again, in 1937, it was a Microbiological Institute scientist who found a particular species of tick harbored the rickettsial germs which caused 9-mile fever - a disease later found to be identical with Q fever. In 1947, Microbiology's scientists discovered that Q fever could be contracted through drinking raw milk or breathing the air of barns housing infected cattle.

At Hamilton, Montana, where the National Institutes of Health maintains its largest permanent field station - the Rocky Mountain Laboratory - scientists specialize in the study of arthropod-borne diseases. Scientists there are working on the natural history of disease in animals and birds, securing data on medical entomology, and maintaining a close watch on the spread of these diseases among humans.

Should biological warfare ever become a reality, scientists in the Microbiological Institute would be an important source of knowledge and manpower to back the nation's defense. In preparation for such an eventuality, these scientists have already taken preliminary steps to define what organisms might be used in biological warfare, how they might be disseminated, and what protective measures are necessary.

Not the least of this Institute's functions is its role as monitor of the nation's biological products. No commercial vaccine, toxin, or antitoxin reaches the corner drug store or is exported out of the country unless it meets the Federal Government's rigid requirements for the safety, purity, and potency of these products. These requirements are prescribed in regulations made jointly by the Surgeons General of the Public Health Service, the Army, and the Navy. The Biologics Control Laboratory enforces these regulations. Its officers regularly inspect manufacturing laboratories and plants in this country and abroad which produce

blood derivatives, chemotherapeutic serums, antitoxins, and similar biological products used in this country for the prevention or treatment of diseases or injuries of man.

The Biologics Control Laboratory has also developed some of these products. Present work, for example, designed to both speed and purify the production of blood plasma, shows promise that future plasma transfusion will be safe from the dangers of hepatitis infection and other impurities, and that plasma can be sterilized much more rapidly than has hitherto been possible.

NATIONAL INSTITUTE OF ARTHRITIS AND METABOLIC DISEASES

When the National Institute of Arthritis and Metabolic Diseases was established in 1950, the Experimental Biology and Medicine Institute was abolished and its activities transferred to the new Institute

The National Institute of Arthritis and Metabolic Diseases thus inherits the record of achievements made by its predecessor--such findings as the cause and cure of pellagra and riboflavinosis, the discovery that ordinary saline solution holds great promise as an effective emergency treatment for shock, the development of synthetic drugs as effective as morphine and codeine in the relief of pain

Though NIAMD has made noteworthy contributions to the treatment of specific abnormal conditions in man, it is largely for their basic research that the laboratories of this organization are known. The laboratory studying sugar chemistry, for example, has been a world focal point for such investigations for over two decades. Laboratory of Physical Biology scientists have played a considerable role in the development of electron microscopy as a tool for observing microorganisms never seen before, for determining the methods by which viruses multiply and develop, and for studying the ultramicroscopic structure of cells and organisms.

From such studies--and from studies on the relationship between cellular metabolism and enzymic catalysis, the biochemistry of muscle contraction, and the metabolism of fats, proteins and carbohydrates--comes our slow documentation of how the whole man functions and thereby how he grows ill, grows old, and dies.

The ultimate purpose of this basic research is new knowledge about particular diseases or about general life processes. Either approach can yield practical contributions to medicine and public health. NIAMD's chemists, for example, are working on the synthesis of cortisone and other steroids for the treatment of arthritis and rheumatic fever. However, basic research on the general rôle of the endocrine glands may also throw light not only on treatment of these diseases ~~and~~ and many others but also on the means for preventing their occurrence. It is this balanced approach, whereby a wide diversity of disciplines ~~and~~ are employed directly to the stubborn metabolic diseases and less directly to the general life processes responsible for both disease and health, which characterizes this Institute's research program.

This balance is amply illustrated by NIAMD's Laboratory of Biochemistry and Nutrition, one of the four major laboratories which encompass NIAMD's research program. The "practical attack" made by its nutritionists involves such studies as the effect of vitamin deficiencies on peptic ulcer; the effect of vitamins on degenerative diseases of the liver, especially cirrhosis of the liver; the relationship of various nutritional elements to the growth of gray hair in animals. On a more general basis, nutritionists are studying the influence of hormones in governing the disposition of food in the body and are trying to determine substances which are necessary for the production and proper function of red and white blood cells.

Like all the Institutes, NIAMD is helping prepare for the nation's defense. The development of synthetic pain-relieving drugs, for example, has made the United States potentially independent of the importation of opium and its principal derivatives, morphine and codeine,from the Orient. NIAMD radiation researchers have provided practical counsel to the Government concerning safety procedures against the dangers of atomic radiation; and in the laboratory, these scientists are studying the effectiveness of a variety of materials in treating the effects of radiation itself. Further studies are going forward on the value of emergency use of saline solution as a plasma substitute in cases of shock due to burn--part of a larger investigation into the whole field of plasma and blood substitutes for treatment of burn, shock, and hemorrhage, all problems of enormous importance in the event of large-scale bombing attacks on our cities.

NATIONAL CANCER INSTITUTE

The structure and reproduction of cells, the chemical activity of cellular components, the role of endocrine glands and their secretions, the reaction of cells to viruses, the effects of radiation on cells--these are typical of the investigations now under way in the National Cancer Institute.

These are cancer problems, but they are also general problems in basic science as well--problems that concern the biologist, pathologist, endocrinologist, biochemist, physiologist, biophysicist, virologist, and cytologist. Because the discovery of cancer "causes" is so elusive and the development of cancer "cures" so difficult, the attack on this disease must be pressed at every point where a clue is indicated. Certain viruses create specific tumors in animals, some cancers are accompanied by certain endocrine disturbances, and cancer in certain animals displays hereditary characteristics. The possibilities for finding the cause and more effective treatment of cancer, therefore, depend on examining these and a wide variety of other questions about the basic processes of life.

The study of cancer is also direct. Scientists of the National Cancer Institute are engaged in the synthesis and testing of chemicals and compounds which might destroy malignant tissue. At the same time they are searching for chemicals or compounds which might be responsible for the abnormal cell growth that we call cancer. Further, they are working on the development of methods by which cancer can be more quickly and surely diagnosed.

These new problems are far from simple. They involve such preliminary questions as: how to induce specific cancers in animals; how to observe the progress of cancer; how to isolate cancer cells from normal tissue. The solution to these problems, largely of laboratory technique, will determine to a great extent the next searching moves more directly related to cancer in the human being.

Since its establishment in 1937, the National Cancer Institute has made important contributions toward an understanding of the cancer enigma in its various aspects. The Institute's investigators have screened, from more than 3,000 compounds, some fifty chemicals which have destructive effects in tumors in mice and in a few instances have shown limited success on humans with advanced cancer. Institute investigators were responsible for first producing experimental gastrointestinal cancer in animals, and for first transforming normal mammalian cells into cancer cells that would invade and kill animals of the same genetic strain as those from which the cells originally came.

Investigators in the Cancer Institute have cultured large masses of living tissue from a single cell, assuring scientists of an entire culture of uniform type, and enabling them to study cell behavior without the confusing presence of normal or foreign cells. Through chromatography, Cancer Institute scientists have further developed a new method of purifying and isolating viruses and cell particles.

Though developments in the treatment of cancer have been slow, progress has been such that where early diagnosis can be made, either surgical or radiation treatment, or a combination of these, can be effective. Advanced and inoperable cases have also benefited from hormone treatments and chemotherapy.

To help reduce ~~the incidence of~~ cancer mortality, the National Cancer Institute maintains a control program whose double purpose is both to create public and professional awareness of present cancer knowledge and to improve cancer services for diagnosis and treatment. This program has done much to lead the cancer patient to the clinic early and to provide him with good medical attention when he gets there.

The control program falls into five general categories: grants to states to help support their cancer control activities; grants to institutions and individuals for special studies, such as the evaluation and development of cancer diagnostic tests; grants to medical schools and other professional schools and institutions to improve or initiate special cancer instruction programs; traineeships to physicians for advanced study; and an educational and informational program for the medical profession and the general public through such media as films, manuals, and exhibits.

When ultimately a simple and easy diagnostic test is developed for mass use, when better treatments or cures for cancer are found, such a program as this will become even more essential. As tuberculosis, when diagnosed early, can be successfully treated with streptomycin,

and other antibiotics, so with cancer, the success of surgery, x-ray, hormone treatment and other as yet unknown modes of treatment will depend on early awareness of the disease by both patient and physician.

NATIONAL INSTITUTE OF DENTAL RESEARCH

In 1931, it was observed that in certain areas the natural occurrence of fluorine in drinking water was responsible for the mottled enamel of teeth. Only seven years later, a Public Health Service dental research worker discovered that this same fluorine might also provide partial protection against tooth decay. Thus began a painstaking course of investigation which is now leading to public adoption of artificial fluoridation of water supply systems for the partial control of dental caries in children.

The series of achievements which has led to adoption of these practical measures in over fifty cities is for the most part due to the experimental work of scientists of the National Institute of Dental Research. The problems have been many. At what fluorine concentration would a maximum protection against decay be provided and at the same time guard against fluorosis or mottled enamel? The answer: one part fluorine to a million parts of water. What harmful side effects might fluorine in this concentration have on the body? The answer: none. To what degree does fluorine actually halt the process of tooth decay?

All the answers to this last question are not yet in. An extensive study is being conducted by the Public Health Service at Grand Rapids, Michigan. Now nearing the halfway mark of a ten to fifteen year trial, it has been found that among older children, whose teeth were already formed when the water fluoridation began, tooth decay has been reduced by 20 to 25 percent, while in younger children,

whose teeth were formed after fluoridation had begun, there was a 60 percent reduction of caries.

Whether artificial fluoridation also protects adults against tooth decay awaits the trial of time. Dental investigators have, however, thoroughly examined one area where natural fluoridation occurs and have found that life-long inhabitants have incurred considerably less tooth decay than adults elsewhere.

In the control of tooth decay, fluoridation is only a partial answer. The final answer must come through better understanding of the normal structure of teeth and all the various factors which may determine tooth pathology. It is this principle which governs a wide variety of investigations in dental bacteriology, histology, and chemistry.

Dental researchers, therefore, are exploring the organic framework of enamel and dentine with the electron microscope; studying the organic components of saliva and the reaction of teeth to various chemical agents. They are studying and classifying the lactobacilli (the acid-forming bacteria of the mouth) and investigating the relation of oral bacterial metabolism to dental caries--which has already shown interesting results, especially the finding that certain fatty acids may have an inhibitory effect on the caries process.

While dental research workers have begun the investigation of the periodontal or degenerative dental diseases, such as gingivitis and

pyorrhea, a full-scale program has been hampered by several factors, particularly the slow expansion of dental research itself and the dearth of trained dental investigators. In its planning for the near future, both through grants-in-aid and through research in its own laboratories, the Dental Research Institute will hope to provide for intensified research in these relatively unexplored fields.

NATIONAL INSTITUTE OF MENTAL HEALTH

To the man, woman or child who suffers from severe psychological or emotional pressures--the man who can't keep a job, the woman who suffers from imaginary illnesses, the child with a record of bad behavior--for these, local mental health programs frequently provide invaluable aid.

Through guidance given by its psychiatrists, psychologists, nurses, and social workers, through lectures and through close contact with teachers and parents, these community programs have often been able to prevent an individual with emotional problems from becoming one of the serious cases of mental maladjustment which now fill half the hospital beds in America.

To help expand these programs where they already exist and to help initiate them where not yet established (almost half the States did not have them in 1946), the Mental Health Institute grants funds to the States and provides them with consultation services. Since there is a serious shortage of highly trained specialists--psychiatrists, clinical ~~clinical~~ psychologists, psychiatric social workers, and nurses--the Mental Health Institute also makes grants to non-Federal institutions for increasing their training and educational facilities in these fields and to assist promising students to continue their studies or research.

Control of almost any disease depends on several factors. Important among these are specific scientific knowledge concerning causes and treatment and public knowledge that preventive measures

and treatment are necessary and available.

The latter presents special difficulties with respect to mental disease. Because people regard mental illness with more embarrassment than most "organic" disorders or because many people do not know that positive steps can be taken to promote good mental health, they do not seek treatment until it is too late.

It is for this reason that mental health scientists working at the Mental Health Center in Phoenix, Arizona, are trying to assess the mental health status of a typical community, to study the factors contributing to mental health problems, and to gain an understanding of the feeling of the local population regarding these problems and how they should be met.

By maintaining an extensive information program through films, publications and other media, the Mental Health Institute attempts to acquaint the public with such facts as already have been assembled concerning the causes and control of emotional and mental disturbances.

In order to extend this knowledge far beyond its present boundaries, the Mental Health Institute maintains a constantly expanding research program.

This program, diversified in scope, is still small in volume--largely due to limited facilities at Bethesda--a problem which will be lessened by the opening of the Clinical Center in 1953.

This Institute has already initiated a series of experimental neurophysiological studies on the convulsive disorders. One such

study has indicated that impairment of the outer membrane of the brain is a factor of importance in causing transient paralysis--a finding significant in determining the cause of epilepsy.

By maintaining cooperative projects with other institutions, the Mental Health Institute has been able to enlarge its operations. At the Worcester Foundation for Experimental Biology, for example, mental health scientists are attempting to track down important physiological clues to the cause of schizophrenia--with particular emphasis on the interrelationship between hormonal imbalance and mental illness. At the Public Health Service's hospital at Lexington, Kentucky, Mental Health Institute scientists have had an opportunity to use as volunteer clinical subjects drug addicts who have violated the Federal Narcotics Act and who are serving their sentences at this hospital. Drug and barbiturate addiction has received intensive investigation in this manner.

At Lexington, Mental Health scientists have made some of their most noteworthy research contributions. They established clinical proof that the synthetic drug, methadone, is a satisfactory substitute for morphine in the relief of pain and developed acetylmethadol, which minimizes the discomfort and dangers of morphine withdrawal from addicts. This group has also demonstrated that some of the widely used barbiturates are truly addicting, with abrupt withdrawal resulting in serious physical reactions, including convulsions and temporary psychoses.

NATIONAL INSTITUTE OF NEUROLOGICAL DISEASES AND BLINDNESS

Only in recent years have the general public and the medical profession become fully aware of the widespread incidence of a number of serious neurological diseases, such as multiple sclerosis, cerebral palsy, and epilepsy. Along with blindness, it is estimated that these almost totally disabling conditions affect more than two million people in the United States.

Investigations on various problems relating to the neurological diseases and blindness have been conducted for some time by several of the Institutes,both directly and through research grants to scientists in other places. Authorization by the Congress in 1950 of a special National Institute for Neutrological Diseases and Blindness will permit these investigations to be broadened and intensified.

Because the long-term basic research program of this Institute will closely parallel in many respects the basic research program of the National Institute of Mental Health, especially with their related interest in problems of neurophysiology, a single scientific director will guide a coordinated laboratory program for both Institutes.

Plans for a research program in the Bethesda laboratories and Clinical Center were begun as soon as the Institute was established. Some grants previously supported by the National Institute of Mental Health were assumed by the new Institute, and through the Advisory

Council of the Neurological Institute, new grants were approved and awarded.

Typical of the studies aided by these grants are: an investigation of the physiology and therapy of convulsive disorders; a study on the growth and regeneration of nerves; an analysis of some regulative mechanisms in neural integration; a clinical and pathological study of the neurological disturbances associated with severe liver diseases; and a study of the nutrition and metabolism of the avascular structures of the eye.

When the National Institute of Neurological Diseases and Blindness is in full operation, a basic research program similar in scope to these grants investigations will be conducted in its own laboratories. And the Clinical Center will provide facilities for a new approach to neurological diseases such as epilepsy, multiple sclerosis, and cerebral palsy, as well as to diseases which cause blindness, such as glaucoma and cataracts.

NATIONAL HEART INSTITUTE

Heart disease is a generic term which embraces more than twenty types of cardiovascular illness; however, only three major forms-- rheumatic heart disease, hypertensive heart disease, and arteriosclerotic heart disease-- are responsible for 90 percent of all cardiovascular disturbances. It is chiefly on these three diseases, which affect almost 10 million people in the United States alone, that the National Heart Institute concentrates its efforts.

Largely because relatively little laboratory space was available when the heart research program was initiated at the National Institutes of Health in 1949, many studies at present are conducted at other institutions.

The Section on Gerontology, for example, which is studying psychological and physiological factors in the aging process, is located at the Baltimore City Hospitals. And in the same city, but at the Public Health Service Marine Hospital, is the Heart Institute's Clinic of General Medicine and Experimental Therapeutics. There are also small groups of Heart Institute scientists working on other cooperative projects with several universities throughout the country.

Though the program is widely dispersed geographically, provision has been made for close integration of clinical and basic research. How successful this integration can be is well illustrated by several recent projects--especially the development of a new drug, procaine amide which has proved successful in stopping irregular, severe, out-or-rhythm heart beat which is a sometimes fatal development following many heart attacks.

Synthesized by the basic research section on Chemical Pharmacology in cooperation with other scientists, procaine amide was tested clinically by the Institute's Clinic of General Medicine and Experimental Therapeutics in Baltimore and at other institutions. It proved not only to be of value against heart arrhythmias, but also showed promise for use as routine therapy for myocardial infarction--critical injury of the heart tissue caused by a blood clot blocking vital circulation in the heart muscle itself.

In the same way, other achievements by Heart Institute scientists have been facilitated by the interchange of information between cooperating basic and clinical research laboratories. Typical of these are the establishment of criteria for better clot-preventing drugs and the development of the electrokymograph as a research tool with potentialities as an aid for making early diagnosis of various heart conditions.

In another way, the Heart Institute has not only made good research use of the fundamental interdependence of basic and clinical research, but also of the interdependence of research in the various diseases. For example, the Heart Institute's Clinic of Gerontology is working in close cooperation with psychiatrists of the Mental Health Institute in order to establish the relationship between physical and psychological deterioration. Similarly, scientists working on rheumatic fever are intimately concerned with not only cardiovascular aspects of this disease but psychological and microbiological factors as well.

In the Heart Institute's project at Framingham, Massachusetts, all causative factors which might produce heart disease are being investigated. Designed to measure both constitutional and conditioning elements which possibly precede cardiovascular disturbances, this study will involve several thousand persons over a long period of years.

The same broad application applies to many other investigations the Heart Institute is making, such as studies on general metabolism, kidney and electrolyte metabolism, the autonomic nervous system, and cellular physiology. These studies will provide investigators in other fields the same kind of invaluable clues for their work as they will for heart research.

CLINICAL CENTER

Inadequacy of scientific communication has frequently impeded medical progress. Even when clinical evaluations rapidly follow significant laboratory findings, initial results may not be conclusive, and more time is lost before contributions of perhaps several investigators in different institutions confirm or invalidate the original findings.

The means of helping to bridge this gap and also of further coordinating the attack on cancer, heart, mental, neurological, and metabolic diseases is now nearing realization at the National Institutes of Health. The Public Health Service's 500-bed Clinical Center, to be completed late in 1952, is designed to provide opportunities for a unified approach to clinical and basic research.

The Clinical Center is distinctive as a research institution. in that it provides twice as much laboratory space as bed space. The concept of clinical research coordinated with basic investigation is carried out by the specific allocations of both bed and laboratory space to the study of specific diseases and by the proximity and close working relationship of these areas on each floor of the Clinical Center.

Both for the patient who has entered the Clinical Center and for the professional people who care for him, the right of the patient to receive the best possible treatment and to be cured if possible is of primary importance. There is, however, one major condition for a patient's admission to the Clinical Center: patients will be admitted only when they meet the diagnostic requirements of a particular disease

condition under study at a given time in one of the several Institutes. A cancer patient at the Clinical Center will be one of a group of cancer patients admitted on the basis of a common diagnosis which meets specific criteria such as the type of cancer, duration prior to diagnosis, sex, age, and weight. These criteria are necessary in order to eliminate the variables which otherwise might hamper research procedure or invalidate its results. The control groups will be assembled through the cooperation of hospitals and private physicians, both in the local area and from all over the country.

After a patient has been admitted to the Clinical Center, the resources, the equipment, and personnel of the most modern of hospitals will be at his disposal. Available to him, according to his needs, will be medical, psychiatric, and surgical care; nursing, nutritional, and social services; rehabilitation, spiritual ministry, and recreational therapy.

Every effort will be made to keep each patient's own physician informed of progress and results of treatment. Special cooperative relationships will be developed with hospitals and health agencies for the referral of patients suitable for study and for their care after discharge. The resources of the patient's home community will, of course, be utilized for convalescent or nursing home care as indicated and for necessary services to his family.

Working together at the Clinical Center to improve existing methods of diagnosis and treatment and to determine the causes of the

diseases under study will be both clinician and laboratory investigator - the clinician availing himself of the latest findings tested and approved in the laboratory, the laboratory workers following down the clues obtained by the clinician.

This close relationship not only represents a linking of basic with clinical research, but more informally provides that stimulus which is inherent in different points of view focused on a common interest. This reciprocity - whether it occurs in the laboratory, the lecture hall, or at the luncheon table - will exist not only between laboratory and clinical researchers and those responsible for patient care, but among the various basic disciplines as well.

While the Clinical Center will function as a unit, the planning and operation of the research will be the responsibility of each institute which has been allocated bed and laboratory space. Such planning need not be restricted, since the Clinical Center has been designed with both structural and organizational flexibility to meet the changes that are constantly taking place in medical and hospital practice and scientific research. Once the planning for the project has been made, the research team is formed, the problems coordinated, and arrangement for incoming patients is begun.

To make these special research resources available to scientists everywhere and to further aid scientific communication, the Clinical Center plans to maintain a visiting scientist program. On appropriate occasion, the National Institutes of Health will invite outstanding

scientists not connected with the Federal Government to make use of the resources of the Clinical Center for the pursuit of special studies of their own selection which promise to be of importance to medical research.

RESEARCH GRANTS

In addition to research in its own laboratories, the Public Health Service conducts a far-reaching program of aid to medical and biological research in universities, medical schools and other non-Governmental institutions. The purposes of the program are to help maintain research projects already in existence, to encourage investigators to undertake research in neglected areas, and to stimulate increased research in small colleges where programs have been limited.

In its administration of the grants program, the National Institutes of Health is guided by seven National Advisory Councils,[1] each of which includes twelve outstanding non-Federal scientists, physicians and leaders in public affairs. Each Council reviews all applications for grants in its special research field and makes its recommendations to the Surgeon General of the Public Health Service for final approval. The Councils, whose members represent a broad area of scientific and public interest, serve as a connecting link between the research programs of Government and private institutions, that they may better serve the research needs of the nation.

The scope of the grants program is indicated by the fact that in 1950 alone, almost 14 million dollars were granted to non-Federal

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[1] National Advisory Cancer Council
National Advisory Mental Health Council
National Advisory Heart Council
National Advisory Dental Research Council
National Advisory Arthritis and Metabolic Diseases Council
National Advisory Neurological Diseases and Blindness Council
National Advisory Health Council (This Council is responsible for reviewing grant applications in research areas not covered by the other Advisory Councils.)

investigators in almost every state. These funds included support of approximately 25 percent of all research conducted in the medical schools of the Nation.

A large number of important scientific discoveries have been made under the grants program. In the year 1950, for example, some of the promising clinical contributions made by investigators supported wholly or partially by Public Health Service grants included: the development of a method for storing red blood cells for several months longer than has hitherto been possible; the development of a more effective treatment for tuberculosis in children; the development of superior anti-malarial drugs and of a treatment drug for peptic ulcer (Banthine); the development of a photoflurographic camera for the diagnosis of gastric cancer; the further development of means for making blood vessel grafts, articular replacements and corneal grafts.

In judging projects which warrant support, the Public Health Service and the Advisory Councils are aided by two consultant groups.

(1) The seventeen[2] study sections, each composed of a group of experts in a specialized field, are drawn from leading research

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[2] Biochemistry and Nutrition
Cardiovascular
Dental
Environmental Health
Experimental Therapeutics
Hematology
Mental Health
Microbiology and Immunology
Metabolism and Endocrinology
Morphology and Genetics
Pathology
Pharmacology
Physiology
Public Health
Surgery
Tropical Medicine
Virus and Rickettsial

institutions all across the country. These specialists review all applications in their field; recommend them for approval, modification, further study, or disapproval; and also survey the status of research in order to determine areas where special investigations might be initiated or developed.

(2) The Research Grants Branches of the respective Institutes further review applications for their relationship to each Institute's program and assign priorities.

Scientific freedom is a guiding principle in this program. Once a grant has been made, the investigator is not subjected to regimentation or interference. At any point he is free to turn off the main road in order to track down the promising but unexpected lead which so often points the way to important scientific discovery.

Most research grant applications are initiated by individual scientists for projects which range across practically every important disease and every type of scientific problem encountered in medical research. In addition, as national needs arise, the Public Health Service may organize large-scale programs of research grants in specific areas. For example, with a special Congressional allocation of $2,300,000 in 1950, the Public Health Service supported a variety of investigations on ACTH and cortisone to obtain as rapidly as possible more precise knowledge of the value of these compounds in the treatment of many different diseases, to determine proper dosage schedules, to discover how to synthesize them or

otherwise increase their availability. Many projects under this special program were devoted to understanding the total function of the pituitary and the adrenal cortex because of the new clues they hold to the study of health and disease.

The Division of Research Grants of the National Institutes of Health administers the grants programs. It also is responsible for administering the Public Health Service's fellowships program--under which, in 1950, more than $1,500,000 was spent to assist 470 fellows. This program, allocating $1600 yearly to the masters'-level fellowship, $3000 to post-doctorates, and higher stipends for special fellows, is a double guarantee that the most promising students in scientific research will be able to continue their development and that the nation will have available a continuing supply of medical research manpower in both war and peace.

Applicants for fellowships are carefully screened by two special Public Health Service boards: a Central Qualifications Board, which makes preliminary recommendations, and a Special Fellowships Board for each Institute. Applicants are reviewed on the basis of already demonstrated ability, including class status and laboratory work.

The Nation-wide program of the National Institutes of Health in support of medical research is broader than research grants and fellowships alone. Several of the Institutes are also authorized to award grants and provide technical assistance for the initiation and improvement of teaching programs, for training of specialized medical and scientific personnel, and for construction of research facilities.

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OF THE

NATIONAL INSTITUTES OF HEALTH

JUNE 22, 1951

FEDERAL SECURITY AGENCY • Public Health Service

WELCOME

On this day when our laboratories are open to visitors and the cornerstone of the Clinical Center will be placed by the President of the United States, it gives me great pleasure to welcome you to the National Institutes of Health.

It is my hope that you will not only enjoy your visit here, but that you will also take away with you a sense of pride in this research center located in your community and devoted to public service.

Director.

OPEN HOUSE

Program

Open House will continue from 1 p. m. to 9 p. m., except for the period from 2:50 to 4:15 p. m., during which time the cornerstone ceremonies for the Clinical Center will take place.

A description of the scientific exhibits and demonstrations open for your inspection follows. A map on the back of this program will help you determine building locations. Once you have entered a building, a receptionist will help you find the specific exhibits and demonstrations in which you are interested.

A program of scientific films (page 15) will be shown in Wilson Hall on the third floor of Building 1.

Sandwiches, coffee, and soft drinks may be purchased in the cafeteria on the third floor of Building 1, at Top Cottage (Building 9 L), and near the entrance of Building 3. Soft drinks may be purchased in front of Building 6.

An Information Desk is in the lobby of Building 1. In the same building, the Lost and Found Office is in room 119, and a doctor is on continuous duty in room 303.

Please feel free to ask for information or assistance of any kind from persons wearing a badge marked "Official."

BUILDING 1

ADMINISTRATION BUILDING

FIRST FLOOR LOBBY

EXHIBIT OF MODEL OF NEW CLINICAL CENTER.

SHOWCASE DISPLAY OF CLINICAL CENTER ITEMS OF HISTORICAL INTEREST.

SHOWCASE DISPLAY OF HISTORIC PAPERS AND OBJECTS RELATING TO THE NATIONAL INSTITUTES OF HEALTH.

THIRD FLOOR

EXHIBIT OF NATIONAL INSTITUTE OF MENTAL HEALTH, SHOWING THE EXTENT OF MENTAL ILLNESS AND CURRENT RESEARCH PROGRAMS.

CONTINUOUS SHOWING OF FILMS IN WILSON HALL.

BUILDING 2

THIS BUILDING HOUSES THE LABORATORY OF PHYSICAL BIOLOGY OF THE NATIONAL INSTITUTE OF ARTHRITIS AND METABOLIC DISEASES.

ROOM NO. B–10

ULTRAVIOLET, VISIBLE, AND INFRARED RADIATION IN BIOLOGICAL RESEARCH.

Spectral distribution of energy, with visualization of invisible portions of the spectrum. Charts showing effects of radiation. DR. F. S. BRACKETT.

ROOM NO. B–15

HIGH INTENSITY X-RAY AND BETA-RAY MACHINES: EFFECT OF X-RAYS ON AMINO ACIDS.

Equipment, charts, and illustrations showing changes induced in irradiated material. DR. C. R. MAXWELL.

ROOM NO. 102

BREATH VELOCITY PATTERNS.

Measurement of breath velocity in an oscilloscope. Visitors may make a paper record of their breath velocity pattern. DR. H. SPECHT.

ROOM NO. 106

MUSCLE PROTEIN CONTRACTION AND BLOOD CLOTTING MECHANISM.

Speed and extent of change in shape of proteins derived from muscle and blood in the presence of activating agents. DR. S. S. SPICER, DR. W. J. BOWEN, and DR. K. LAKI.

ROOM NO. 108

RESPIRATION OF DDT-POISONED FLIES.

Action of DDT on flies' breathing as measured in the Warburg respirometer. DR. J. B. BUCK.

ROOM NO. 111

TOXICITY STUDIES ON DEVELOPING EMBRYOS.

Use of developing chick embryos to detect possible harmful effects of food contamination through pesticides. DR. W. F. VON OETTINGEN.

EFFECTS OF RADIATION FROM ONE ANIMAL GENERATION TO THE NEXT.

Absorption of radioactive bicarbonate by eggs produced by an irradiated frog. DR. F. SPERLING.

DISTRIBUTION OF RADIOACTIVE CARBON IN ANIMAL TISSUES.

Excretion and tissue distribution of carbon eight days after a single injection of radioactive sodium bicarbonate. DR. E. MAXWELL.

ROOM NOS. 115 AND 120

FACTORS AFFECTING SURVIVAL AFTER IRRADIATION.

Graphs, charts, and animals showing the survival value of various treatments. DR. W. W. SMITH, DR. F. SMITH, and DR. G. G. ASHWELL.

ROOM NO. 116

BLOOD VOLUME AUGMENTATION: EFFECTS OF MASSIVE DOSAGE WITH "DEXTRAN."

Charts showing the detectable effects of this substitute for plasma. DR. LOUISE H. MARSHALL.

ROOM NOS. 117 AND B–16

PHYSICAL-CHEMICAL STUDIES ON IRRADIATED PROTEINS.

Charts and apparatus showing the subtle effects of nuclear radiations on the fundamental units of living tissues. DR. W. R. CARROLL.

ROOM NO. 118

RADIOLOGICAL SAFETY AFTER AN A-BOMB EXPLOSION.

Foods subjected to neutron bombardment and assay of radioactivity by Geiger counters. MRS. D. C. PETERSON and DR. S. H. WEBSTER.

HIGH ENERGY NUCLEAR PARTICLES FROM PRIMARY COSMIC RADIATION.

Photographic evidence of high energy collisions between cosmic radiation and atoms. DR. H. YAGODA.

ROOM NO. 119

EFFECTS OF X-RAYS ON ONE-CELLED ORGANISMS.

Demonstration of irradiated and normal protozoa. DR. R. G. DANIEL.

SECOND FLOOR HALL

FINE STRUCTURE OF VIRUSES AND VARIOUS BIOLOGICAL TISSUES.

Microorganisms and cellular structures as seen under the electron microscope. DR. R. W. G. WYCKOFF.

TEMPO. BUILDING, REAR OF BUILDING 2

USE OF THE HIGH ALTITUDE CHAMBER IN PHYSIOLOGICAL RESEARCH.

Effects of altitude on animals. DR. P. D. ALTLAND.

BUILDING 3

THIS BUILDING HOUSES SECTIONS OF THE NATIONAL HEART INSTITUTE AND THE NATIONAL INSTITUTE OF ARTHRITIS AND METABOLIC DISEASES.

ROOM NO. SB–3

METHODS FOR THE PURIFICATION AND ISOLATION OF VITAMINS FROM NATURAL MATERIALS.

Procedures used for following the vitamins through the various purification steps, with demonstration of large-scale laboratory equipment used. DR. J. C. KERESZTESY and DR. M. SILVERMAN.

ROOM NOS. 100–106

TYPICAL CLINICAL BIOCHEMISTRY LABORATORY.

Routine diagnostic tests used in a wide variety of diseases. DR. K. KNOWLTON, MRS. C. RISLEY, MR. L. KEDDA, and MR. A. KAVALUNAS.

ROOM NO. 101

CHEMICAL STUDIES IN THE RHEUMATIC DISEASES.

Effects of ACTH or cortisone in lowering high level of amino sugars in blood and connective tissue which occurs in patients suffering rheumatic diseases. DR. N. F. BOAS.

ROOM NO. 104

THE BRAIN AND ENDOCRINE DISEASES.

Influence of brain in regulating metabolic processes of body, such as blood sugar level and utilization of protein by the body, and in the storage of fat. DR. E. ANDERSON, DR. K. KNOWLTON, and S. M. M'CANN.

ROOM NO. 105

ENZYMES AND CORTISONE.

Production of steroid hormones, such as ACTH and cortisone, outside the body through enzymes separated from adrenal glands. DR. M. L. SWEAT.

ROOM NO. 106

ASSAY OF ACTH.

Determination of ascorbic acid level to measure amount of ACTH stored in the adrenal gland. DR. G. L. FARRELL.

ROOM NO. 109

ASSAY OF CORTISONE IN BLOOD AND URINE.

Measurement of cortisone as determined by the percentage fall of circulating eosinophile cells of the blood. DR. E. ROSEMBERG, MR. V. R. LOVING, and MR. R. ST. JOHN.

ROOM NO. 112

ENZYMES IN BACTERIA.

Isolation of bacteria from soil; laboratory growth of these bacteria preparatory to collecting and extracting enzymes and measuring their activity. DR. O. HAYAISHI.

ROOM NO. 114

SEPARATION OF PROTEIN USING AN ELECTRICAL FIELD.

Separation of protein molecules by electrical apparatus which automatically segregates slow-moving molecules from fast-moving molecules. DR. J. W. ROWEN.

ROOM NO. 115

ISOLATION OF COMPONENTS OF LIVING CELLS.

Separation of enzymes from living cells and reactions studied in test tube. DR. A. KORNBERG and DR. L. A. HEPPEL.

ROOM NO. 116

GLASS BLOWING.

Complicated and specialized glass equipment as needed for scientific experiments. MR. A. F. ROBBINS.

ROOM NO. 119

CHROMATOGRAPHY.

Cellular materials purified by chromatography and compounds labeled with radioactive atoms located with a Geiger counter.

ROOM NO. 121

TYPICAL BIOCHEMICAL LABORATORY.

Compounds chemically synthesized in test tube in presence of enzymes undergoing same cellular reaction as they normally would in a body. DR. B. L. HORECKER.

ROOM NO. 200

EXPERIMENTAL HEART DISEASE.

An exhibit of pericarditis (inflammation of heart sac), showing effects of the disease and modes of treatment. DR. J. O. DAVIS, DR. D. S. HOWELL.

ROOM NO. 201

ELECTROKYMOGRAPH AND PHANTOM HEART.

Photoelectric device for observing and recording movements and density changes in the intact heart, as seen on the standard fluoroscope. DR. B. R. BOONE.

FLUORESCENT SPECTRUM ANALYZER.

A device scans the different wave lengths of fluorescent light emitted from various drugs and reveals their characteristic fluorescence allowing identification and measurement of minute quantities of material. DR. R. L. BOWMAN.

ROOM NO. 203

ELECTRO-MAGNETIC FLOW METER.

An experimental device for indicating the velocity flow wave in an unopened blood vessel. DR. R. L. BOWMAN.

BALLISTOCARDIOGRAPH.

A device for detecting and recording the minute vibrations of the body caused by the beating heart. MR. F. W. NOBLE.

ROOM NO. 205

HEART SOUNDS.

Sounds of healthy and unhealthy hearts heard and seen by means of a special magnetic tape recorder, a loudspeaker, and visual reproduction of the heart tones. DR. F. G. GILLICK.

ROOM NO. 218

PROCAINE AMIDE, A NEW DRUG.

A 5-minute movie shows the development of procaine amide, a new drug for the dramatic slowing down of the irregular beating of "crazy hearts." The drug is now widely used by physicians for the treatment of ventricular arrythmias. DR. B. B. BRODIE.

BUILDING 4

BUILDING 4 HOUSES SOME OF THE LABORATORIES OF THE NATIONAL INSTITUTE OF ARTHRITIS AND METABOLIC DISEASES AND THE NATIONAL INSTITUTE OF DENTAL RESEARCH.

ROOM NOS. 103–105

TYPICAL CHEMICAL LABORATORY.

Equipment used by chemists working on the synthesis of new drugs. MR. T. D. PERRINE.

ROOM NOS. 104–106

TYPICAL CHEMICAL SERVICES LABORATORY.

Equipment used for the cleaning of chemical glassware and for preparing chemical reagents. MR. R. W. WILKERSON and J. C. LYONS.

ROOM NOS. 107, 109, 111

NUTRITIONAL STUDIES.

Effects of vitamins, hormones, and amino acids on body growth; the effects of diet on liver disease and peptic ulcers; and the effect of traces of certain elements on gray hair in black rats. DR. W. H. SEBRELL, DR. F. S. DAFT, DR. J. M. HUNDLEY, DR. E. A. HAWK, MR. E. G. McDANIEL, DR. L. V. PECORA, DR. M. REID, DR. K. SCHWARZ, DR. R. O. SCOW.

ROOM NO. 110

CHEMICAL ANALYSIS ON A MICROSCALE.

Methods used for determining the composition of new compounds and for determining trace quantities of various substances. MR. W. C. ALFORD.

ROOM NO. 113

STUDIES ON CARBOHYDRATES AND SUGARS.

The common carbohydrates and the variety of substances of medical importance which can be produced from table sugar. Many rare sugars and their sources (often familiar plants) are shown. (Visitors are invited to compare their sweetness.) DR. H. G. FLETCHER and DR. N. K. RICHTMYER.

ROOM NOS. 114–115

THE SYNTHESIS OF CORTISONE.

Samples of some materials—plants and seeds—for possible synthesis of cortisone; intermediate materials and cortisone itself; description of partial synthesizing methods. DR. E. MOSETTIG.

ROOM NO. 118

CHEMOTHERAPY OF TUBERCULOSIS AND LEPROSY.

Development and action of drugs for treatment of these diseases. DR. H. BAUER, DR. Y. T. CHANG, DR. E. EMMART, and DR. E. L. JACKSON.

ROOM NOS. 121–123

METHODS FOR STUDYING NERVE CONDUCTION.

The electrical impulses of nerve conduction demonstrated visually, and effects of drug action discussed. DR. A. M. SHANES.

ROOM NOS. 122–124

TRAUMATIC SHOCK—METHODS OF TREATMENT.

Comparison of various methods of treating shock, with demonstrations of results obtained in mice with salt solutions given by mouth. DR. R. C. MILLICAN, DR. H. TABOR, and DR. S. M. ROSENTHAL.

ROOM NO. 125

HISTOPATHOLOGIC TECHNIQUES.

The process of preparing permanent stained microscopic slides from fresh tissues and organs. DR. R. D. LILLIE and DR. J. A. PEERS.

ROOM NO. 126

TRAUMATIC SHOCK MECHANISMS.

Measurements of fluid, sodium, potassium, and metabolism of mice in shock; effects of injected fluids on the circulation, and their fate in the body. DR. H. TABOR, DR. R. C. MILLICAN, and DR. S. M. ROSENTHAL.

ROOM NO. 127

HISTAMINE METABOLISM.

Studies on metabolism of histamine in the test-tube showing its pharmacologic activity. DR. H. TABOR, DR. S. M. ROSENTHAL, and DR. R. C. MILLICAN.

ROOM NO. 128

APPLICATION OF RADIOACTIVE ISOTOPES IN STUDIES ON THE PROCESS OF IMMUNITY.

Apparatus and techniques for the separation and analysis of proteins by means of radioactive tracers. DR. R. F. SMITH and DR. H. A. SAROFF.

DEMONSTRATION OF A MEMBRANE DIFFUSION COLUMN.

Apparatus used for the continuous separation of solids from large quantities of biological fluids and solutions. DR. R. E. SMITH and DR. H. A. SAROFF.

ROOM NO. 129

DISEASES OF EXPERIMENTAL ANIMALS.

Photographs and illustrations showing animal diseases similar to man's and methods of preventing epidemic outbreaks in experimental animal colonies. DR. W. T. S. THORP.

INDUCED OBESITY IN MICE.

Mice fattened by injection of a gold-containing drug as part of studies on obesity. DR. G. BRECHER.

DIAGNOSTIC HEMATOLOGY.

Changes which occur in blood in the presence of various diseases. DR. W. T. S. THORP and DR. G. BRECHER.

ROOM NO. 130

HISTOPATHOLOGY AND HISTOCHEMISTRY.

The structural and chemical differences between normal and diseased tissue as seen under the microscope. DR. R. D. LILLIE and DR. J. H. PEERS.

ROOM NOS. 131, 132, 133

ORAL BACTERIA.

Phase microscope demonstration of living bacteria commonly found in the mouth. (Smears for demonstration will be taken from individuals present.) DR. R. M. STEPHAN.

Demonstration of acid produced from sugars by bacteria found in the film of teeth. DR. R. J. FITZGERALD.

Darkfield demonstration of spirochetes commonly found in trench mouth. DR. E. G. HAMPP.

EXPERIMENTAL TOOTH DECAY.

Rat and hamster jaws with sound and decayed teeth. Testing of various agents for prevention of tooth decay. DR. F. J. McCLURE.

SUBMICROSCOPIC STRUCTURE OF TEETH.

Photographs of enamel and dentine taken under the electron microscope. DR. D. B. SCOTT.

ORGANIC COMPONENTS OF SALIVA.

Separation of the amino acids of saliva by filter paper chromatography, and their identification by use of color-producing spraying agents. DR. I. ZIPKIN.

GRAND RAPIDS WATER FLUORIDATION STUDY.

The introduction of sodium fluoride to a public water supply system to determine degree to which it protects against tooth decay. DR. H. T. DEAN and DR. F. A. ARNOLD, JR.

BUILDING 5

THIS BUILDING HOUSES THE LABORATORY OF TROPICAL DISEASES AND THE LABORATORY OF BIOLOGICS CONTROL OF THE NATIONAL MICROBIOLOGICAL INSTITUTE.

NORTH AND SOUTH CORRIDORS

PICTORIAL EXHIBITS ON SOME MAJOR TROPICAL DISEASES.

Life cycles of various parasites, and descriptions of the diseases caused by them. DR. W. H. WRIGHT.

ROOM NO. 103

ANALYSIS OF THE LIFE PROCESSES OF PARASITES AND THEIR CARRIERS.

Studies on the way these organisms obtain their energy for growth and reproduction as a condition for understanding how they cause disease and how they can be attacked by drugs and chemicals. DR. T. VON BRAND and DR. E. WEINBACH.

ROOM NO. 107

METHODS OF CULTIVATING INTESTINAL AMOEBAE.

Organisms grown in the laboratory for the purpose of studying their life processes; preparation of materials from them for use in diagnostic tests. DR. C. W. REES, MISS L. REARDON, and DR. L. JACOBS.

ROOM NO. 108

PARASITES CAUSING SLEEPING SICKNESS (AFRICAN TRYPANOSOMIASIS) AND OTHER DISEASES.

Studies on the cultivation, pathogenicity, and drug resistance of certain microorganisms which inhabit blood and tissue. MRS. E. TOBIE.

ROOM NO. 114

LABORATORY TESTS FOR DIAGNOSIS OF PARASITIC DISEASES.

Development and improvement of blood serum tests for the diagnosis of amoebic infections, leptospirosis, toxoplasmosis, trypanosomiasis, and other diseases. MR. J. BOZICEVICH and DR. J. E. TOBIE.

ROOM NO. 115

DRUG TREATMENT OF MALARIA AND AMOEBIC DYSENTERY.

Methods for testing chemicals which may be used to treat disease, and the mechanism of action of particular compounds. DR. G. R. COATNEY, DR. J. GREENBERG, and DR. E. S. JOSEPHSON.

ROOM NO. 129

INSECT CARRIERS OF DISEASE.

Testing possible carriers of toxoplasmosis (ticks, mosquitoes, "kissing bugs," lice, fleas, and other insects and arthropods); what environmental influences on the "bugs" may be used to control them, and how poisons act on them. DR. P. A. WOKE, DR. J. JONES, and MR. W. H. W. KOMP.

ROOM NO. 130

LARVAE OF PARASITIC WORMS.

Demonstration of the infective stages of hookworms that live in the soil. DR. P. WEINSTEIN and DR. L. OLIVIER.

ROOM NO. 131

CHEMICALS VS. SNAIL CARRIERS OF SCHISTOSOMIASIS.

Testing of chemical compounds to destroy snails which incubate the larval forms that infest man with schistosomiasis, a widespread tropical disease. MRS. M. O. NOLAN and DR. W. T. HASKINS.

ROOM NO. 132

AQUARIA-REARING OF NATIVE AND EXOTIC SNAILS.

Propagation of snails in the laboratory to test various kinds as carriers of schistosomiasis. DR. E. B. CRAM and MR. W. B. DE WITT.

ROOM NO. 309

BLOOD GROUPING AND Rh TYPING.

Tests on sera used in the determination of blood groups and Rh types. MRS. A. M. LEVY.

ROOM NO. 311

WHOOPING COUGH AND *HEMOPHILUS INFLUENZAE* INFECTIONS.

Cultures of the organisms which cause the infections, together with some of the products used in their prevention and treatment. DR. M. PITTMAN.

ROOM NO. 313

ISOLATION AND CULTIVATION OF INFLUENZA VIRUSES USING THE HEN'S EGG.

Methods used for isolating new strains of influenza virus with a view to improving existing vaccines. DR. B. EDDY.

ROOM NO. 315

STUDIES ON DIPHTHERIA AND DYSENTERY TOXINS.

Photographic illustrations of some of the methods used in measuring the effects of these toxins. DR. S. BRANHAM.

ROOM NO. 318

BIOLOGICAL STANDARDS.

A display of some of the National Institutes of Health toxins, antitoxins, and vaccines, and a demonstration of the apparatus used in drying them from the frozen state. DR. J. W. HORNIBROOK.

ROOM NO. 320

CONTROL TESTS ON BIOLOGICAL PRODUCTS.

Some of the great variety of biological products controlled by the Laboratory of Biologics Control in accordance with Federal law. DR. R. MURRAY.

ROOM NOS. 330–332

NORMAL HUMAN PLASMA.

The steps in the production of liquid and dried plasma from human blood. DR. J. T. TRIPP.

BUILDING 6

THIS BUILDING HOUSES LABORATORIES OF THE NATIONAL CANCER INSTITUTE.

SUBBASEMENT 8

THE OPERATION OF THE ELECTRON MICROSCOPE.

Functioning of electron microscope which enables scientists to observe and study cell matter and microorganisms too small to be seen under ordinary light microscope. DR. H. KAHLER.

ROOM NO. SB–12

DEMONSTRATION OF THE MASS SPECTROMETER IN IDENTIFYING AND MEASURING STABLE ISOTOPES.

Respired breath of rat analyzed automatically in 15 minutes by mass spectrometer, which produces a record to aid in determining effects of therapy or nutrition on experimental animal. DR. A. W. PRATT.

LOBBY

ELECTRON MICROSCOPE STUDIES OF CELLS.

Photographs of submicroscopic material revealing the finer structure of both normal and abnormal cells of the gastro-intestinal tract and kidney. DR. A. J. DALTON.

STUDIES OF CELL ADAPTATION IN SURVIVAL.

Reaction of one-celled animals exposed continuously and rhythmically to high temperatures. DR. R. R. SPENCER.

ROOM NO. 310

TRANSPARENT CHAMBER STUDIES IN CANCER.

Study and observation of tumors in mice under microscope as observed through special transparent "window" surrounding tumor tissue. DR. G. H. ALGIRE.

ROOM NOS. 328–334

TISSUE CULTURE IN CANCER RESEARCH.

Growth of single, living cell outside body and multiplication into a cell colony, a technique enabling study of normal and abnormal cell growth on uniform cell cultures. DR. W. R. EARLE.

BUILDING 7

THIS SPECIALLY DESIGNED BUILDING HOUSES THE LABORATORY OF INFECTIOUS DISEASES OF THE NATIONAL MICROBIOLOGICAL INSTITUTE. (CHILDREN UNDER SIXTEEN CANNOT BE ALLOWED BEYOND GROUND FLOOR OF THIS BUILDING.)

GROUND FLOOR LOBBY

EXHIBIT ON HERPANGINA.

Factors in spread, clinical manifestations, and causes of this seldom recognized child's disease. (Outbreaks of this disease occurred in Montgomery County in 1949 and 1950.) DR. R. J. HUEBNER.

GROUND FLOOR

EXHIBIT ON WORLD HEALTH ORGANIZATION INFLUENZA STUDY PROGRAM IN THE UNITED STATES.

Showing world-wide effort by W. H. O. to improve the quality and completeness of the reporting of influenza throughout the world. DR. D. J. DAVIS.

FIRST FLOOR LIBRARY

EXHIBIT ON LABORATORY TESTS USED IN THE DIAGNOSIS OF VIRUS DISEASES AND DISEASES DUE TO RICKETTSIAE.

Showing the special procedures necessary in the collecting and handling of material for these tests. DR. K. HABEL.

FIRST FLOOR SOUTH WING

TYPICAL RESEARCH UNIT STUDYING INFECTIOUS DISEASES.

Studies on diseases of a highly infectious nature, especially poliomyelitis, in surroundings which afford the maximum protection to the workers involved. DR. K. HABEL.

BUILDING 8

THIS BUILDING HOUSES SOME OF THE LABORATORIES OF THE NATIONAL CANCER INSTITUTE.

ROOM NO. 12

INBRED STRAINS OF MICE USED IN CANCER RESEARCH.

Special inbred, pure lineage mice that will spontaneously develop tumors at certain body sites, affording scientists ready sources for study of cancer of the lung, liver, breast, blood, and other sites. DR. W. E. HESTON.

INTRACELLULAR MINERALS IN TUMORS REVEALED BY MICRO-INCINERATION.

Sections of tissue which are burned carefully in high-temperature oven, the remaining mineral skeletons revealing distribution of minerals in normal and cancerous cells and changes in skeletons of tumor cells treated with chemical or physical agents. DR. R. C. MAC CARDLE.

CARCINOMA OF THE CERVIX IN THE MOUSE.

Photographs of cervical smears and studies of cells as they appear in experimental cervical cancer. DR. E. D. MURPHY.

MOTION PICTURE SCHEDULE

WILSON HALL

Third Floor, Building 1

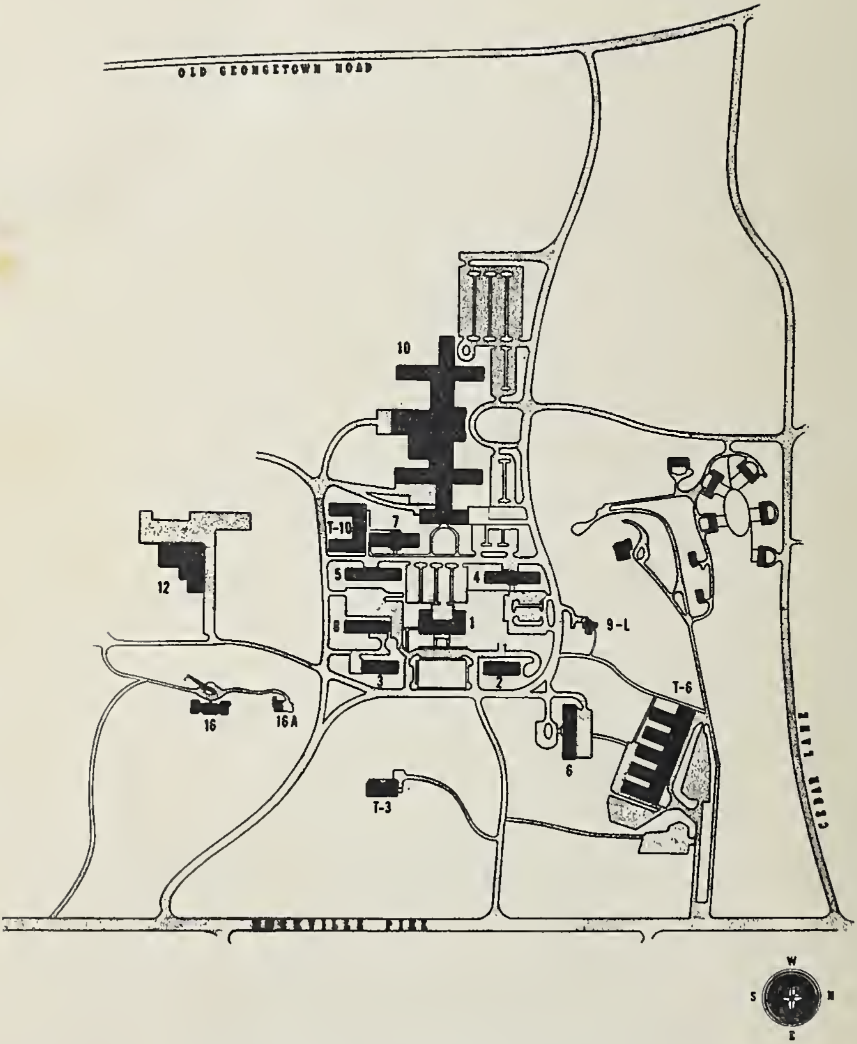
Mr. R. Campbell

Time	*Film*
1:00–1:28	Report on the Living A young victim of rheumatic fever is treated and cured with the new drug, ACTH.
1:40–2:10	Challenge: Science Against Cancer A story of research into the secrets of cancer and the living cell.
2:20–2:45	Activity for Schizophrenia Shows treatment for mental patients in a Veterans Administration Hospital.
2:55–4:15	Intermission
4:15–4:35	Story of Wendy Hill The detection and control of diabetes.
4:45–5:15	Preface to a Life How parental attitudes affect emotional development in children.
5:25–6:05	Journey Into Medicine A young doctor enters public health work.
6:15–6:25	So Much for So Little The need for public health services.
6:35–7:02	Guard Your Heart A middle-aged man finds that some work is too strenuous for his middle-aged heart.
7:10–7:42	Angry Boy A child-guidance clinic helps an emotionally disturbed boy.
7:50–8:20	Challenge: Science Against Cancer A story of research into the secrets of cancer and the living cell.
8:30–8:55	The Steps of Age A story about the emotional problems of aging.

FEDERAL SECURITY AGENCY
OSCAR R. EWING, *Administrator*

Public Health Service
LEONARD A. SCHEELE, *Surgeon General*

National Institutes of Health
WILLIAM H. SEBRELL, JR., *Director*



Guide to the National Institutes of Health

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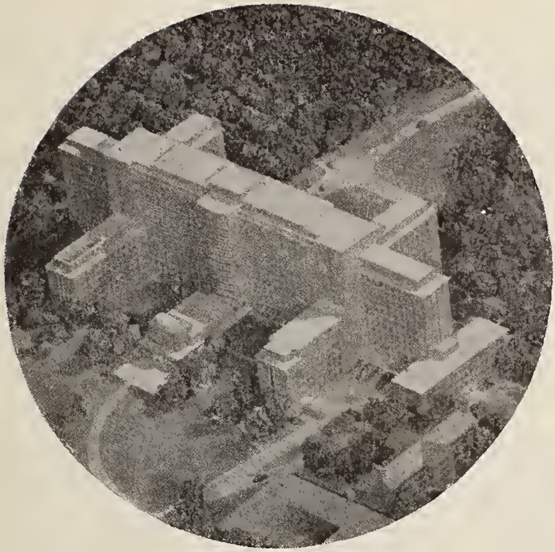

JUN 20 '51

CORNERSTONE CEREMONY

CLINICAL CENTER

NATIONAL INSTITUTES OF HEALTH

JUNE 22, 1951

FEDERAL SECURITY AGENCY ● Public Health Service

The trowel for this ceremony was used in laying the cornerstone of the Public Health Service Building, 19th Street and Constitution Avenue, May 7, 1932.

CARD OF ADMISSION

TO THE

CLINICAL CENTER CORNERSTONE CEREMONY

NATIONAL INSTITUTES OF HEALTH

BETHESDA, MARYLAND

FRIDAY, JUNE 22, 1951

3:15 P. M.

admit two

RESERVED SECTION OF SEATS

Reserved

T
c
1

By Harry Goodwin—The Washington Post

S AFTER CORNERSTONE CEREMONY

TRADITIONAL CER

as Surgeon General

Triumphs of Health Service Are Recorded in Cornerstone

Public Health Service yesterday banked memorabilia of its past triumphs in a cornerstone, and showed off its current research at its health institutes, in Bethesda, Md.

The historic record was sealed by President Truman into the cornerstone of the service's new $40,000,000 Clinical Center of its National Institutes of Health.

The exhibits and demonstrations of current research, much of it to be later correlated into clinical work in the center's 500-bed hospital, were displayed throughout the Bethesda institution, research arm of Public Health Service. It marked the most comprehensive open house program ever staged there.

Sealed into the cornerstone were samples symbolizing recent advances in clinical medicine, such as therapeutic aids, drugs, illustrated techniques and devices.

June 23, 1951

Truman Serves

intelligence

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medical personnel.

"In order to supply more doctors and nurses," the President declared, "we will have to strengthen and expand our

SATURDAY, J

Good Health Plan Asked By President

Would Accept Less Than Compulsory Program, He Says At PHS Ceremony

Pictures on Page B-1

By Nate Haseltine
Post Reporter

President Truman said here yesterday he'd settle for less than his national compulsory health insurance plan—if its opponents come up with anything even "almost as good."

The renewed offer, seemingly an invitation to compromise, was coupled however with his assertion that the rapidly-expanding voluntary health insurance plans are not reaching those who need them most.

President Truman discussed the subject in his address preceding his laying of the cornerstone for Public Health Service's new Clinical Center, National Institutes of Health, at Bethesda, Md.

Some 3000 guests and spectators sat or stood through the hour-long, open-air ceremonies, despite sporadic sprinkles and a threatened downpour. The soaking rain that came after the program's end barely gave the crowd time to reach cars or the shelter of buildings.

Wants Workable Plan

Declaring that he still believes his own plan of national health insurance financed by payroll deductions is "sound," and that its adoption would "greatly strengthen" the Nation, the President added:

"I want to make it clear, however, that I am not clinging to any particular plan.

"What I want is a good workable plan that will enable all Americans to pay for the medical care they need. And I will say here and now that if the people who have been blocking health insurance for five years will come up with a better proposal—or one even that is almost as good—I'll go along with them.

"I want to get the job done, and I'm not concerned in the slightest with pride of authorship."

75 Millions Without Insurance

Concerning voluntary medical care plans, President Truman said present ones provide "reasonably complete medical care insurance" to fewer than 4,000,000 Americans. Another 75,000,000 have no health insurance at all, and "skyrocketing medical costs are pushing millions of Americans into the medically indigent class," he declared.

He pointed out that the Clinical Center, the 500-bed research hospital now under construction, will be making research discoveries which "must not be confined to a chosen few, simply because the rest of us cannot afford to use them."

The President termed the Clinical Center, now scheduled to receive selected patients by January, the future home "of one of the greatest groups of scientists ever gathered together for basic and applied medical research."

Nor will the Center be just "an isolated enterprise" for the U.S. Public Health Service, the President said, pointing out that it will be shared with research scientists from medical schools, private hospitals and other private institutions.

Praises Science

He praised medical science for its victories over "the deadliest diseases of a generation ago." Now, he added, the second half of the century presents an even greater challenge, "the battle against chronic diseases."

Listing the major chronic illnesses as cancer, heart trouble, diabetes, and "the most heart-

See CORNER, Page 7, Col. 8

Truman Lays Cornerstone of $40 Million Clinical Center

By Harry Goodwin—The Washington Post

PART OF CROWD OF 3000 LISTENING TO PRESIDENT'S ADDRESS AFTER CORNERSTONE CEREMONY

TRADITIONAL CEREMONY—President Truman lays cornerstone of new Center as Surgeon General Leonard Scheele (left) and builder John McShain help out

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June 23, 1951

Truman Serves Notice of Drive For Medical Aid

Hasn't Given Up Idea, He Says, in Laying Bethesda Cornerstone

President Truman today served notice that he has not given up his fight to establish a national health insurance program.

"Our objective must be to make the best modern medical care available to more and more people," Mr. Truman said. "I intend to keep right on working for that."

Open House Held at National Health Institute in Bethesda. Page B-1

In an address at the laying of the cornerstone of the $40 million clinical center at the National Institutes of Health, Bethesda, the President said:

"I want to make it clear, however, that I am not clinging to any particular plan. What I want is a good workable plan that will enable all Americans to pay for the medical care they need

Invites Better Proposal.

"And I will say here and now that if the people who have been blocking health insurance for five years will come up with a better proposal—or even one that is almost as good—I'll go along with them.

"I want to get the job done and I am not concerned in the slightest with pride of authorship."

The American Medical Association, which has been leading an expensive fight against compulsory health insurance, decided last week to curtail its campaign because the fight was won and the threat of what it called "socialization" temporarily dispelled.

However, the President said "skyrocketing medical costs are pushing millions of Americans into the medically indigent class," and added he has been proposing since 1945 to meet this problem by national health insurance.

Need in Lower Brackets.

Mr. Truman said that at the present time less than 4 million Americans have reasonably complete medical care insurance, and 75 million have no health insurance at all.

"I have been very glad to see the growth of many private health insurance plans over the last several years," he said. "But the plain fact is that they do not meet the problem. They are not reaching the overwhelming majority of low and middle income families."

A partial text of the President's address follows:

We are here today to lay the cornerstone of a building which will be devoted to the service of mankind. . . .

As a people, we have constantly sought better health and longer lives for our citizens. We have done so not merely because human strength and human intelligence are great national assets. Far more important, we believe that there is something sacred about every human soul that God has put on this earth.

We believe in the rights of the individual. We acknowledge his supremacy over the state. That is the great mark of distinction between our democracy and the totalitarian dictatorships. . . .

This clinical research center will advance the work that is being done by all of us to achieve better health. . . .

Cites Former Scourges.

At the turn of the century the average American could expect to live only 49 years. The two biggest killers, pneumonia and tuberculosis, exacted a frightful toll. Diphtheria and typhoid ran wild. We were losing 130 of every thousand babies before they were a year old. Our maternal death rate was very high—more than six mothers died in childbirth for every thousand babies born.

Today, many of these scourges have been almost completely eliminated. . . .

Most remarkable of all, we have extended the average life 18 years

(Continued on Page A-4, Col. 2.)

Truman Serves Notice He Will Continue Drive for Medical Aid

(Continued From First Page.)

in this short half century. . . . Medical science has won victory after victory over the deadliest diseases of a generation ago. . . .

Preventive Steps Stressed.

Modern medicine must find ways of detecting these chronic diseases in their early stages and of stopping their destructive force. That will be the major work of this clinical research center.

The center will be operated by the Public Health Service of the Federal Security Agency. It will be the home of one of the greatest groups of scientists ever gathered together for basic and applied medical research. . . .

The fine record of the Public Health Service research workers promises well for the future. This magnificent building will give them many new opportunities to forge ahead in the field of medical discovery. . . .

This clinical research center will not be an isolated enterprise. Research scientists from medical schools, private hospitals and Federal Government will continue to make grants-in-aid for medical research in other places. . . .

Federal Support Needed.

Today, there is a growing awareness that medical research needs support from the Federal Government, from State and local governments, and from industry, endowment funds and private contributions. It will take support from all these sources to give us the rapid progress we need.

At the same time that we are moving forward with medical research, we must drive ahead to translate the new knowledge gained by research into better medical care for more people. Here we have run into difficult problems, but we are making progress. . . .

I am happy that the United States Senate at its present session has passed legislation to help strengthen and expand the Nation's local public health units in our cities and counties. I hope that the Congress will complete action quickly on this legislation. . . .

In recent years, the education of students in the medical, dental, nursing and allied professions has not kept pace with the increase in population. These shortages are crippling hospital services all over the country. . . .

War Aggravates Shortage.

These shortages are being aggravated by the needs of our armed forces. . . .

In order to supply more doctors and nurses, we will have to strengthen and expand our schools. In spite of the best efforts of the medical schools, they have had to turn away thousands of applicants each year. The income of the medical schools has not risen to meet the rising costs of medical education. They are today in the most precarious financial condition in their history. . . .

Legislation to remedy this situation is now before the Congress. This legislation will provide emergency Federal aid for five years to tide the schools over the present crisis. The overwhelming majority of the medical school deans support this legislation. . . .

Finally, we have the problem of meeting the cost of medical care. The research discoveries which will be made at this clinical center and elsewhere must not be confined to a chosen few, simply because the rest of us cannot afford to use them.

At the present time, most people find it very difficult to pay for medical care. I have been very glad to see the growth of the many private health insurance plans over the last several years. But the plain fact is that they do not meet the problem. . . .

75 Million Not Insured.

Less than 4 million Americans have reasonably complete medical care insurance and 75 million have no health insurance at all. Skyrocketing medical costs are pushing millions of Americans into the medically indigent class.

Since 1945 I have been proposing to meet this problem by national health insurance. This proposal has generated a great deal of controversy. I still believe it is sound and that the Nation would be greatly strengthened by its adoption.

I want to make it clear, however, that I am not clinging to any particular plan. What I want is a good workable plan that will enable all Americans to pay for the medical care they need. And I will say here and now that if the people who have been blocking health insurance for five years will come up with a better proposal—or even one that is almost as good—I'll go along with them. . . .

Medical care is for the people and not just for the doctors. Our objective must be to make the best modern medical care available to more and more people. I intend to keep right on working for that.

I have been speaking of the medical needs of our country. We should never forget, however, the extremely fortunate position we are in compared to the rest of the world.

Throughout the world, almost half the people—more than 1 billion men, women and children—are victims of preventable disease. . . .

Help to Others Urged.

Obviously, people with such handicaps face immense difficulty in striving for economic and social progress. It is urgently necessary that we help them to learn and put into effect modern medical knowledge and public health methods. This is one of the most important parts of the work we must do under the Point IV program. . . .

We cannot expect . . . quick results in the underdeveloped areas of the world. They are desperately short of doctors and nurses and health facilities of all kinds. . . .

More health technicians are being trained. Last year, thousands of professional health workers came to the United States for training—they came from the Philippines, Latin America and many other areas all around the world

We are also sending our specialists abroad. . . .

Key to Improvement.

This public health work is the key to improving conditions in the underdeveloped areas. No funds we can spend will bring richer rewards in human progress and in strength for peace. . . .

As we lay the cornerstone of this clinical center, I see in this structure a symbol of what is finest in our way of life.

Triumphs of Health Service Are Recorded in Cornerstone

Public Health Service yesterday banked memorabilia of its past triumphs in a cornerstone, and showed off its current research at its health institutes, in Bethesda, Md.

The historic record was sealed by President Truman into the cornerstone of the service's new $40,000,000 Clinical Center of its National Institutes of Health.

The exhibits and demonstrations of current research, much of it to be later correlated into clinical work in the center's 500-bed hospital, were displayed throughout the Bethesda institution, research arm of Public Health Service. It marked the most comprehensive open house program ever staged there.

Sealed into the cornerstone were samples symbolizing recent advances in clinical medicine, such as therapeutic aids, drugs, [illegible] techniques and [illegible]

They included:

An electro-encephalogram, or brain wave recording, indicating spreading brain damage, a current research project of the National Institute of Mental Health.

A Papanicolaou cancer smear test slide indicating presence of cancer of the cervix, for the National Cancer Institute. A venus catheter, to measure blood pressure in the different chambers of the heart, for the National Heart Institute.

A sample of methadon, developed by Public Health Service to make this country independent of foreign sources of supply for the opium drugs it replaces; also sodium fluoride, which Public Health Service found helps prevent tooth decay.

Also incorporated into the cornerstone vault were samples of sulfa drugs, penicillin, ACTH, cortisone, normal human blood plasma (dried), sodium pentotahal, DDT, vaccines, and synthetic vitamins.

Rains which sent the 3000 guests scurrying for their cars and home after the cornerstone-laying cut heavily into the expected attendance at the exhibits and demonstrations.

Those who stayed, however, had free access to all the seven institutes and their laboratories, excepting the radiological laboratory where research is carried on with radioactive isotopes. Even Memorial Laboratory, which has been closed to the public since it was inaugurated in October, 1946, was thrown open to show the work being done there on organism infectious diseases.

CORNER—From Page 1

'Good' Health Plan Asked

rending of the chronic afflictions, mental illness," President Truman declared:

"Modern medicine must find ways of detecting these diseases in their early stages and of stopping their destructive force. That will be the major work of this clinical research center. There could be no more useful expenditure of the taxpayers' funds."

Despite "great strides" in the field of public health, he said, the present local public health system "is woefully inadequate to meet its responsibilities."

"Thirty-two million Americans," said the President, "live in areas which are not served by fulltime public health workers."

Medical Education Need

He also touched on the need to increase the Nation's medical education facilities, pointing out that hospitals and research centers are worthless without trained medical personnel.

"In order to supply more doctors and nurses," the President declared, "we will have to strengthen and expand our schools. In spite of the best efforts of the medical schools, they have had to turn away thousands of applicants each year.

"The income of the medical schools has not risen to meet the rising costs of medical education. They are today in the most precarious financial condition in their history."

He then launched into the Federal efforts to remedy the situations, including national compulsory health insurance, and broached his willingness to compromise for "results."

For The People

"Medical care," he declared, "is for the people and not just for the doctors and the rich. Our objective must be to make the best modern medical care available to more and more people.

"I intend to keep right on working for that as long as I am President of the United States, and also after I get through being President of the United States."

As he finished speaking, more rain fell. Stepping back again to the microphone, he told the applauding crowd:

"Go ahead and put up your umbrellas. I'm a Baptist, myself, and I don't like to be sprinkled, either."

Other participants in the program included Federal Security Administrator Oscar R. Ewing, Dr. Leonard A. Scheele, surgeon general; Dr. W. H. Sebrell, jr., director of NIH, and Dr. Detlev W. Bronk, president of the National Academy of Science.

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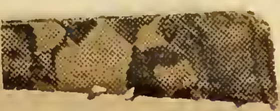

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ts are Dr. Arthur L. Besselle,
ch st. ne.; Dr. Thomas J. Black-
jr., 4491 MacArthur blvd.; Dr.
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PROGRAM

INVOCATION	Rev. Frederick Brown Harris Chaplain of the Senate
PRESIDING	Oscar R. Ewing Federal Security Administrator
WELCOME	Dr. W. H. Sebrell, Jr. Director, National Institutes of Health
ADDRESS	Dr. Detlev W. Bronk President, National Academy of Science
REMARKS	Dr. Leonard A. Scheele Surgeon General, Public Health Service

ADDRESS

AND THE

LAYING OF THE CORNERSTONE

BY THE

PRESIDENT OF THE UNITED STATES

BENEDICTION	Rev. Bernard Braskamp Chaplain, House of Representatives

PRESENTATION OF THE COLORS, U. S. COAST GUARD

MUSIC BY UNITED STATES MARINE CORPS BAND
Major William F. Santelman, Conducting

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